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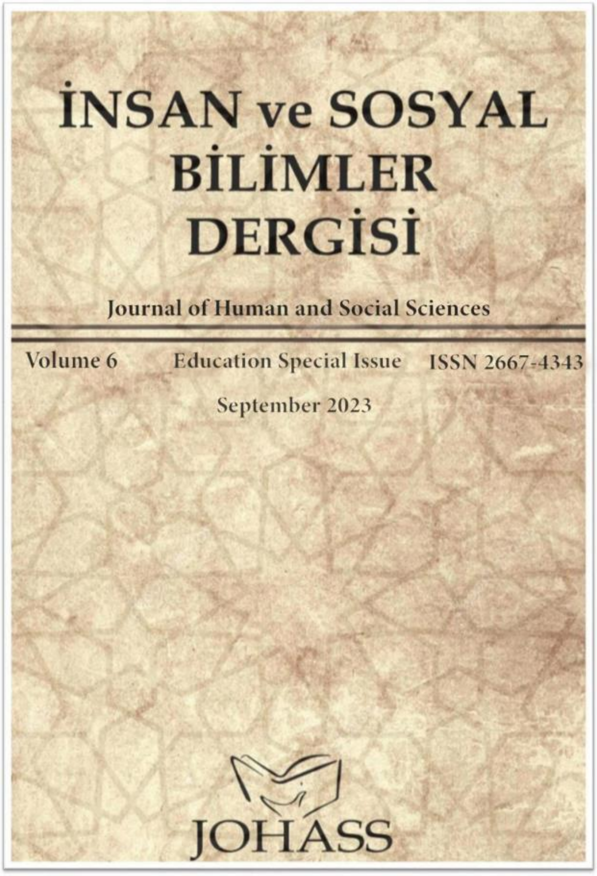

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Opinions of Foreign Convicts Learning Turkish in Penal Institutions on Learning Turkish

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Opinions of Foreign Convicts Learning Turkish in Penal Institutions on Learning Turkish

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Abstract **Research Article**

The aim of this study was to explore the perspectives of convicts who are studying Turkish as a foreign language in penal facilities about learning Turkish. Of qualitative research designs a basic qualitative research design was employed in the study, and the data were gathered through semi-structured interviews. The study was carried out with a cohort of 10 foreign convicts in a penal facility located in Ankara. The obtained data underwent content analysis and were subsequently presented in the form of tables. The findings of the research revealed that foreign convicts and detainees aim to learn Turkish for reasons of force majeure, integration, social factors, and future-oriented expectations. Force majeure factors encompassed essential humanitarian needs (such as official and private communication, daily necessities, emotional sharing, healing, health, social and spiritual support, and economic needs) as well as legal needs. Integration-related reasons included considerations of the attitudes of Turkish citizens, the need for belonging, and the need to adapt to prison life. Reasons stemming from social and personal factors included the need to know new people, acculturation, and education. Future-oriented expectations comprised the desire to reside in Türkiye, the desire for an early release, and familial responsibilities. Additionally, the study revealed that convicts learning Turkish as a foreign language encountered challenges linked to the linguistic characteristics of Turkish, personal problems, and constraints during the language learning process.

Keywords: Teaching Turkish as a foreign language, penal institution, foreign national, convict, detainee

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Introduction

In the contemporary era, the progress in transportation and communication technologies driven by globalization has made various parts of the world more reachable for individuals who have access to these technologies. People's short-term accommodation requirements, such as trips and vacations, can be a result of this accessibility, but it can also result in extended visits or even permanent settlements. When this ease of accessibility is combined with the political, economic, and social conditions in an individual's home country, it can lead to a necessity for some people to relocate or establish residence in a different country for the long term. When examining the situation in Türkiye, it becomes evident that foreign nationals choose to be in Türkiye for a variety of reasons. These motivations encompass diverse reasons like tourism, education, seeking asylum, migration, and healthcare.

In recent years, most of the foreigners coming to Türkiye are immigrants from countries in Türkiye's neighborhood. Economic difficulties and political instability in these countries have become an important challenge for Türkiye's migration policy (T.C. Ministry of Foreign Affairs, n.d.). In recent years, there has been a significant increase in the number of migrants entering Türkiye, especially due to the ongoing political instability and conflict in Syria. The total number of regular migrants in Türkiye is 4 million 797 thousand 593, including 3 million 293 thousand 934 Syrians under temporary protection, 1 million 213 thousand 143 under residence permit, and 290 thousand 516 under international protection (T.C. Directorate of Migration Management, 2023). Therefore, it can be stated that the number of foreign nationals living in Türkiye under different statuses such as temporary protection, residence permit, and international protection status has increased considerably in recent years.

Türkiye's position as a gateway to Europe, its economic and social development, and its stable and secure structure make it a preferred country for irregular migrants as well as other groups. According to the data of the Migration Management Administration (n.d.), while the number of irregular migrants apprehended was 44,415 in 2011, this number increased steadily to 454,662 in 2019 and then decreased to 285,027 in 2022. The majority of irregular migrants apprehended are citizens of countries such as Afghanistan, Pakistan, Palestine, Turkmenistan, Bangladesh, Uzbekistan, Morocco, Yemen, and Iraq.

Some foreign nationals who are in Türkiye for a variety of reasons are sometimes prosecuted under the laws of the Republic of Türkiye for committing unlawful acts, and some of these individuals are sentenced in Türkiye. As prisoners or detainees, these individuals are confined for a period of time in penal execution institutions affiliated with the Ministry of Justice of the Republic of Türkiye. Convicts and detainees are individuals who have stepped outside the target circle drawn by the state and society, have committed a crime, or are imprisoned for a variety of reasons (Atila, 2018). The increasing population of migrants in Türkiye is similarly reflected in the proportion of foreign national convicts in penal institutions. According to the data of the Türkiye Statistical Institute (2021), in 2020, 851 foreign nationals were imprisoned for drugs: 673 for theft, 263 for looting and extortion, 148 for deprivation of personal liberty, 118 for murder, 136 for smuggling, forgery, and fraud, 61 for violation of family protection measures, and 472 for other offenses. In 2011, the number of foreign convicts and detainees who committed crimes and entered penal institutions was 274 under the aforementioned headings, and it is understood that this number increased by 1012% in 9 years.

The process of reintegrating convicts and prisoners back into society holds significance in terms of both preventing crime and including individuals in public order along with specific attributes. Bauman (2020) highlights the objectives of rehabilitation, reform, and re-education for convicts, noting that the penal execution system allows for observation and supervision. From this perspective, it is clear that since foreign detainees and convicts are required to live in a different country, in a new socio-cultural context, in an unfamiliar social environment, with a limited number of people, and under certain restrictions, their reintegration into the existing public order through means such as education, is crucial.

Individuals who are aimed to reintegrate into the public and social order must have their social requirements met. Communication is one of the most essential social needs of the individual, both within and outside of penal institutions. Sever (1998) states, “Effective participation in social life in a democratic society requires the development of adequate communication skills.” Considering the situation of foreign convicts and detainees in their own context, not speaking the local language is one of the biggest obstacles to their effective participation in social and social life. According to the United Nations Office on Drugs and Crime (UNODC) in 2009, foreign national convicts and detainees encountered challenges stemming from language barriers. These obstacles lead to a lack of comprehension of the justice system, avoiding necessary contact and support crucial for social integration, difficulties in communicating with fellow convicts and prison staff, devoiding of participation in prison activities, and violation of confidentiality in physical and psychological health services. To effectively address these barriers and facilitate the successful reintegration of foreign national prisoners into society, language education is an issue that needs to be carefully emphasized.

To meet the individual, social, and societal needs of foreign convicts and detainees and to facilitate their reintegration into society, teaching the Turkish language will be an effective first step. In fact, this situation has been acknowledged by the Ministry of Justice, and Turkish courses for foreign nationals have been started in penal institutions. On the basis of the Turkish courses for foreign convicts and detainees will contribute to the linguistic and communicative skills, it can be predicted that these courses will facilitate the integration of foreign convicts and detainees into the life of penal institutions and the society in which they reside. As language and communication barriers are eliminated or minimized, achieving the objectives outlined in the Law on the Execution of Criminal and Security Measures (Resmî Gazete, 2004) "encouraging re-socialization, facilitating adaptation to a productive and responsible lifestyle that respects laws, regulations, and social rules" will be easier.

Due to the increasing number of foreign national convicts and detainees in penal institutions, integration issues have the potential to worsen, necessitating that the relevant institutions meet the Turkish language learning needs of these convicts and detainees. It is anticipated that the Turkish language education required by foreign nationals will not be similar to that required by other foreign nationals in the country and will not produce results that are generally consistent with the literature on certain topics. In light of these factors, it is believed that revealing the objectives of foreign convicts to learn Turkish will contribute to the determination of needs and expectations in teaching Turkish to foreigners. It will also help to review teaching methods, techniques, and materials, as well as the education process in general.

In Türkiye, teaching Turkish to foreigners through public institutions and organizations, universities, foundations, and private businesses has attained a certain level of organizational memory. The acquired knowledge and experiences are also reflected in the studies in the relevant literature. In recent years, researchers have conducted a large number of studies examining the objectives of non-Turkish speakers to acquire Turkish and their difficulties in learning Turkish in a variety of contexts. Opinions towards learning Turkish have been examined under many dimensions such as; Learners' nationality (Aljaradat

&Yeşilyurt, 2021; Kara, 2022; Karatay, 2018; Şengül, 2017; Tok&Yıgın, 2013; Tunagür&Kardaş, 2021; Tunçel, 2016; Yaşar&Batur, 2021;Yıldız&Varlı, 2021;), educational level (Boylu et al., 2018; Büyükikiz&Hasırcı, 2013; Demir&Genç, 2018; Derman, 2010; Gürbüz&Güleç, 2016; Kaplan, 2018), and social status and roles (Akkaya, 2013; Biçer&Özaltun, 2020; Bölükbaş, 2016; Moralı, 2018; Şahin et al., 2021; Yıldız&Sertoğlu, 2019). In fact, the Turkish learning objectives, needs, problems, and perspectives of foreign secondary school students and university students, students and employees, children and adults, Arabic speakers and Russian speakers, refugees, and resident foreigners differ from each other to a certain extent. In the process of learning Turkish, it is necessary to address each situation in its own context due to this difference. Nevertheless, the review of existing literature reveals that the aspect concerning teaching Turkish to foreign nationals within penal facilities has not been sufficiently addressed, despite its sensitive and distinctive nature.

The fact that the number of foreign detainees in penal institutions is increasing day by day and that this increase has the potential to reveal communication-related problems in the future makes it necessary to examine the issue of language learning in penal institutions in all aspects. Accordingly, the purpose of this research is to determine the attitudes of convicts who study Turkish as a foreign language in penal facilities. With this objective, the study sought answers to the following questions:

1. What are the learning objectives of convicts studying Turkish as a foreign language?
2. What problems do convicts encounter while learning Turkish as a foreign language?

Method

Research Model

This study, aimed at assessing the perspectives of convicts who were learning Turkish as a foreign language, utilized the basic qualitative research design—a type of qualitative research design. Qualitative research is an approach that explores research issues concerning the significance attributed by individuals and groups to a social event or a humanitarian process. This is realized through the application of interpretive/theoretical frameworks, and the analysis of data collection is conducted within a natural setting. This process involves the establishment of both inductive and deductive patterns and themes (Creswell, 2021, p. 45). In this particular study, the information gathered from the participants through interviews was analyzed using the framework of inductive and deductive patterns and themes, leading to the creation of corresponding codes.

Participants

The participants of this study consisted of 10 foreign national convicts and detainees studying Turkish in a penal institution in Ankara. The socio-demographic characteristics of the convicts and detainees in the study group are presented in Table 1.

Table 1

Distribution of Socio-Demographic Characteristics of Foreign Convicted and Detained Students

Socio-demographic Characteristics	Groups	Number (n)
Age Group	22-30	2
	30-40	7
	40-50	1
	50 and up	0
Education	Unschooled	1
	Elementary sch.	5
	Middle school	2
	High school	2
Period in Prison	Less than 1 year	1
	1-3 years	5
	3-5 years	2
	Over 5 years	2
Mother Language	Arabic	6
	Uyghur	1
	Uzbek Turkish	1
	Turkmen	2
Nationality	Suriya	4
	Iraq	4
	Uzbekhistan	1
	East Turkestan	1
Turkish Level	A1	1
	A2	5
	B1+	4

In accordance with Table 1, 20% of the participants are aged 22 to 30, 70% are aged 30 to 40, and 10% are aged 40 to 50. 10% have not attended school, 50% have completed elementary school, 20% have completed middle school, and 20% have completed high school. 10% have been detained for less than one year, 50% for one to three years, 20% for three to five years, and 20% for more than five years. 60% of the convicts speak Arabic, 10% Uyghur, 10% Uzbek Turkish, and 20% Turkmen. 40% are from Syria, 40% are from Iraq, 10% are from Uzbekistan, and 10% are from East Turkestan; 10% speak Turkish at the A1 level, 50% at the A2 level, and 40% at the B1 level or higher.

Data Collection Tool

The data was collected using a semi-structured interview form developed by the researchers in accordance with the literature review and expert opinions. During the preparation of the semi-structured interview form, the opinions of three field experts with PhDs, academic studies in Turkish education, and at least five years of experience teaching Turkish to foreigners were sought. The number of questions was reduced from seven to five after field experts provided their feedback. The following questions were asked to foreign convicts and detainees:

1. Do you believe that learning Turkish will contribute to your prison life? Please provide an explanation with reasons.
2. Do you believe that learning Turkish will help you in legal situations and the trial process? Please provide an explanation with reasons.
3. Do you believe that learning Turkish will help you after your release from prison? Please provide an explanation with reasons.
4. Do you believe that learning Turkish will enhance your social and personal interactions? Please provide an explanation with reasons.
5. What problems did you encounter while learning Turkish in prison? Please describe them.

Within the scope of the research, since six participants' responses were collected in written form, the pertinent questions were translated into Arabic, the native language of the participants. With the participation of the researchers and two translators, an online meeting was held to translate the interview questions into Arabic. During the online meeting, the researchers provided the translators with a comprehensive explanation of the intended meaning of the questions. Together, the translators finalized the translation based on this explanation. A different translator was asked to translate the final version of the translation into Turkish. The structure and meaning of this translation were found to be identical to the original questions. Finally, it was determined that the translations were suitable for data collection for the research.

Data Collection and Analysis

The interviews were conducted with foreign nationals who had completed or were enrolled in Turkish language classes at the penitentiary on a voluntary basis. One of the researchers conducted a preliminary interview with the convicts and detainees prior to the actual implementation and evaluated their Turkish oral communication levels in order to obtain reliable data on the topics subject to the interviews. The preliminary interviews determined that six participants had a language proficiency level of B1 or lower. Upon evaluation, it was determined that the current Turkish language proficiency levels of these learners were insufficient for providing deeper emotional and cognitive transfer for this study. For this reason, six participants were interviewed in their mother tongue, Arabic, and four participants were interviewed in Turkish.

The face-to-face interviews were carried out in Turkish by one of the researchers and written by the same person due to the unavailability of audio/video recordings. The relevant questions were then shared in Arabic with six participants to gather written data. Two distinct translators translated the participants' responses into Turkish, and a third translator, who is an expert in the subject, compared the two translations. Since there were no significant differences in terms of meaning, but there were lexical differences, one of the expert translator's translations was accepted as correct, and raw data were collected. The researchers analyzed the final data using the content analysis method. "Content analysis necessitates a more in-depth analysis of the gathered data in order to reach concepts, categories, and themes that explain the data. In content analysis, the emphasis is on the collected data; codes are obtained from events and phenomena that are frequently repeated in the data set or that the participant emphasized strongly (Baltacı, 2019, p. 377). In this study, each researcher read and coded the responses independently. After completing the relevant classification procedure, categories and themes were determined through repetitive discussions of the codes in two separate sessions.

Validity and Reliability

To ensure the validity and reliability of the study, Creswell's (2021) strategies for ensuring validity and reliability in qualitative research were used. To assure diversity, participants were chosen based on factors including period in prison, age, level of education, and nationality. However, the number of convicts participating in Turkish courses prevented maximum diversity. Each interview continued until completed, and adequate time was allotted to each participant. During the analysis process, the coding was conducted independently, and after the analyses were complete, the coding was discussed in two separate sessions.

Ethics Approval

The ethics committee permission for the article was given by the Yıldız Technical University Social and Human Sciences Research Ethics Committee at its meeting numbered 2023/08 on August 18, 2023.

Findings

In this section, the findings and interpretations obtained by analysing the data obtained from semi-structured interview forms are presented. Qualitative findings are tabulated and interpreted.

Findings and Interpretations on the Purposes of Turkish Language Learning of Convicts Learning Turkish as a Foreign Language

The first question of the research is “What are the learning objectives of convicts studying Turkish as a second language?” The opinions of the convicts who learn Turkish as a foreign language about the purposes of learning Turkish are shown in Table 2 as themes and categories.

Table 2

Turkish Learning Objectives of Convicts Learning Turkish as A Foreign Language

Themes	Categories	Participants
Force Majeure	Humanitarian Needs	(P1, P2, P3, P4, P5, P6, P7, P8, P9, P10)
	Legal Needs	(P1, P2, P3, P8, P9)
Integration Related Reasons	Attitudes of Turkish Citizens	(P1, P5, P8)
	Need for Belonging	(P1, P2, P5, P9, P10)
	Need for Adaptation to Prison Life	(P1, P2, P3, P4, P5, P6, P7, P8, P9, P10)
Social-Personal Reasons	Meeting New People	(P1, P2, P4, P5, P7, P8, P9)
	Acculturation	(P4, P5, P6, P8, P9, P10)

Themes	Categories	Participants
	Education	(P1, P3, P6, P10)
Future-oriented Expectations	Desire to live in Türkiye	(P1, P2, P3, P4, P5, P8, P9, P10)
	Desire for Early Release	(P2, P4, P5, P8, P9)
	Familial Responsibility	(P1, P5, P6, P10)

Analyzing Table 2 reveals that the Turkish learning purposes of the convicts who learn Turkish as a foreign language are comprised of four themes: force majeure, integration, social, and future-oriented expectations. Humanitarian needs are the most frequently mentioned category in the theme of force majeure in Turkish learning objectives (f=10). Due to humanitarian needs, all of the convicts who participated in the interview emphasized the importance of learning Turkish. Despite the fact that legal needs were mentioned less frequently (f=5), the participants who emphasized legal needs constitute half of the total cohort. It is notable that half of the participants highlighted legal needs as one of the reasons for learning Turkish. The following are examples of participant statements regarding the theme of force majeure as it relates to the Turkish learning purposes of foreign convicts and detainees:

> *"Before I was sent to prison, I lived in Mamak. Most of the shops in our neighborhood were owned by Arabs. Iraqis and Syrians always speak Arabic in the neighborhood. But it is necessary to know Turkish outside." (P1)*
>
> *"Some people do not speak Turkish. It is very difficult for them being in prison. Others help them but not always." (P1)*
>
> *"... Knowing Turkish is a necessity. In the bazaar, market, hospital, prison... Turkish is spoken everywhere... If you don't speak Turkish, you always ask for help from others." (P2)*
>
> *"...For example, although I needed a psychologist and a religious official, I could not see them privately because of my language problem." (P9)*
>
> *"...I need to write to the canteen for the supply of my basic needs, but I could not fill the canteen forms." (P8)*
>
> *"This is a foreign place for us. Shopping, traveling, being examined, going to school, getting along with people, and even living in prison depend on speaking Turkish." (P5)*
>
> *"Even if I speak with the help of an interpreter in court now, I can understand what he/she asks and translates. I can give answers in Turkish myself, which attracts the attention of the court committee, and they like it." (P8)*
>
> *"I write my petitions to the court and prosecutor's office in Turkish. I can read and understand the documents brought by my lawyer.'' (P3)*

In accordance with the interview data, when the objectives of foreign convicts and detainee students to learn Turkish are examined in terms of force majeure, the topics of meeting daily needs, official-private communication needs, health-social-spiritual support needs, and legal needs come to the forefront.

Taking into account the execution status of foreign convicts and detainees reveals the legal reasons for their need to learn Turkish. The desire to be familiar with the Turkish legal system and to be able to follow the trial proceedings without feeling anxious is another crucial reason for foreign prisoners and detainees to learn Turkish. The statements of one participant are as follows:

> *".... I could not fully understand what was told. I could not convey what I thought in this process. I could only get simple answers about the information written in my legal status papers... If you want to learn about legal issues, it is useful to know Turkish." (P9)*

In conclusion, the need for foreign convicts and detainees to learn Turkish increases for the following: the communication skills necessary for maintaining routine practices, shopping, conveying internal and external demands within and outside the institution, and comprehending instructions; sharing and healing needs arising from being human; medical-spiritual-social support needs and economic motives. This situation is obvious in the participant interviews, as shown in Table 2.

The necessity of adapting to the life of the penal facility is the most frequently described category in the theme of reasons deriving from integration. The entire group (f=10) acknowledged the need for adaptation to the penal facility. This category is followed by the need for belonging (f=5) and Turkish citizens' attitudes (f=3). Some participant statements on the topic of the integration-related reasons for learning Turkish are as follows:

> *"Afghans, Syrians, Iraqis do physical work...It is useful for us to know Turkish in official and private work." (P1)*
> *"I am in a foreign country, and I am in prison. I don't know this place at all...I was very anxious, stressed...Then, I established communication (with other convicts and detainees) at work. Now, I don't feel like a foreigner. I know the rules." (P10)*
> *"I learned about cities; I want to live in Mersin. I like listening to the radio, Turkish music is very good." (P9)*
> *"...There is a TV in the ward, but it does not show Arabic channels. I could not watch Turkish channels. If you live in Türkiye, I think it is essential to know Turkish. This need is felt more in prison. It is not possible to get support from other friends all the time. Even if it is, it is not enough. Institution officials do not speak Arabic." (P8)*
> *"Those who learned Turkish are comfortable in prison; they are getting used to it more easily." (P2)*
> *"I can speak Turkish a little, so I am comfortable in prison. I entered the prison, they asked me questions, and I answered them. ...We can communicate with our*

teachers and administrators in prison. We can read magazines and books. We can watch television. We benefited from our Turkish a lot" (P6)

"Learning Turkish is essential, especially for those who are thinking of living in Türkiye... They do not like Syrians who do not speak Turkish here." (P5)

"I find it difficult to spend time in the ward. I met new friends through Turkish lessons." (P7)

"From what I have seen and heard from other foreign prisoners, life becomes difficult for those who do not speak the language. I have never seen a convict who can live his life comfortably and solve every problem by speaking Arabic, like in his country." (P4)

"I have fewer mistakes now. I speak better; they do not treat me like a foreigner...I have never been in prison before; this place is very different from Iraq. It is necessary to adapt and to know Turkish for this reason." (P2)

"Learning Turkish is a necessity in Türkiye. I want to travel and to see different places." (P2)

"I was illiterate. My friends wrote my needs, my petitions for me... It is not always possible to ask someone for something. After a certain time, the relationship between people deteriorates. You become a burden for them. After Turkish lessons, I am not a burden on others. I am not in need of anyone, thanks to God.'' (P4)

When foreign convicts and detainees' reasons for learning Turkish are analyzed in terms of integration, the need to adapt to the conditions of the penal institution (f=10) comes to the fore as the most prominent one. It is believed that the foreign participants- who are also convicts in Türkiye- attach importance to learning Turkish for the purposes of meeting new people, wandering, reading books, listening to music, chatting, struggling with discrimination, adapting to the conditions of the penal institution, and feeling to belong. Below are participant comments regarding the penal institution life of foreign convicts and detainees:

"Foreign convicts had many problems. It is very difficult not to speak Turkish in prison. Conditions are more difficult for them." (P1)

"Foreign convicts chat among themselves and tell about their court experiences." (P2)

"My father is Turkmen. I knew Turkish a little bit, so I didn't have much communication problem. If I were like other foreigners, I would have a hard time living here." (P3)

"I could not fully explain my illnesses. Then, they put me in a ward with other foreigners. With the support of the people there, I tried to get used to the prison, and I tried to learn the rules. If you do not follow the rules, it is very difficult to live here." (P5)

The titles that arose under the social-personal reasons theme are the desire to meet new people (f=7), acculturation (f=6), and training needs (f=4). The following are examples of participant comments regarding the social-personal reasons theme of the objectives for learning Turkish:

"I can also communicate with my Turkish friends. I get to know new people. Would this be possible if I did not speak Turkish?" (P1)

> *“Time does not pass easily here. We do the same things every day... We have met new friends in the lessons, we talk to them. We chat with my Turkish friends in Turkish, it is very good for us.” (P2)*
> *“Harmonization is good. Foreign convicts should attend the classes. They will make new friends and learn new information.” (P10)*
> *“I have a notebook where I write song lyrics. I solve puzzles, play word games with my friends. I read books. I chat with my Turkish-speaking friends.” (P3)*
> *““When you learn Turkish, you gain the ability to get into people and express yourself. It is up to you to utilize this opportunity.” (P4)*
> *“I am interested in drawing, I have been drawing since I was little. After I learned Turkish, I started to buy drawing and painting books. I read them, and I learn new things. I started to borrow religious books from the library. I both improve myself and spend my time by reading.” (P5)*
> *“I ask for books from my teacher. I learned a lot from books. I listen to Turkish music. Hande Unsal’s songs are very nice. After I learned Turkish well, I felt comfortable... To read, learn, listen to music, watch films and series, and talk to other people (in Turkish) is very good.’’ (P6)*
> *“I can watch Turkish TV series, I started to watch the Great Seljuk Alparslan series.” (P8)*
> *“Enes, my son, started primary school this year. My wife and I want to contribute to his education.’’ (P10)*
> *“I want to continue my education, then I want to work and live in Türkiye...” (P2)*
> *“I attend Turkish preaches, I understand most of them. ...I watch films. Knowing Turkish is a great comfort.” (P10)*

The titles that emerged in the theme of reasons deriving from future-oriented expectations are the desire to reside in Türkiye (f=8), the desire for early release (f=5), and the familial responsibility (f=4). The following are examples of participant statements on the topic of reasons for learning Turkish based on future-oriented expectations:

> *“ ...People who commit crimes in other countries are tried again when they return to (Country name deleted), they go to prison. That’s why I do not want to go back to ....” (P6)*
> *“I am a welder; I used to work in construction. I want to start my own business; I am making plans... If I know Turkish, people will treat me well.’’ (P1)*
> *...In (Country name deleted), life is very difficult. There is no peace there; Türkiye is safe. I know Turkish so that I can find a job more easily.’’ (P2)*
> *“... If I am released and live in Türkiye, what else would I want...Turkish is necessary for that...” (P3)*
> *“I lived in Urfa for a short time. I have relatives and friends there. I want to get married. If there is no problem, I will live in Türkiye if God wills.’’ (P4)*
> *“.... Therefore, the language I learned will be useful for me to study and earn money, and it will also help my family to get used to this place. I like Turkish very much.” (P6)*
> *“... (Country name removed) is still unsafe, and probably I will not return there. My family lives in Gaziantep. I want to live there.’’ (P9)*
> *“I have a citizenship of……. Some of my friends and relatives are in prison there. Türkiye and ... are very different; I do not like there, but I live and worship here comfortably. Türkiye is very beautiful; it is like my homeland. Our people are the same. Our culture is the same. I will live in Istanbul if God wills (P10)*

"Attending classes, obeying the rules, and good conduct offers an opportunity for early release for convicts." (P5)
"A law was enacted last year. Learning Turkish is a great opportunity. I can be released from prison earlier.'' (P2)
"...I will communicate better with Turkish people... My children and my younger brother go to school in Mamak. I will help them at school." (P1)
"I lived in Urfa for a short time. I have relatives and friends there. I want to get married. If nothing goes wrong, If God wills, I will live in Türkiye. I used to work as a telephone salesman in Raqqa. I can open a shop or work in a telephone shop in Sanliurfa. I believe that I will benefit from learning Turkish for this." (P5)
"My father is dead, I have only my mother and my brother. ... If God wills, I will continue to live in Türkiye after I am released... I don't know, maybe I can work in the apparel industry or do some other trading jobs." (P6)

Findings and Interpretations on the Problems Faced by Convicts Learning Turkish as a Foreign Language while Learning Turkish

The second research question posed the following: "What problems do convicts encounter while learning Turkish as a foreign language?" The problems encountered by convicts learning Turkish as a foreign language were categorized into three subthemes: language-related issues, limitation-related issues, and personal issues. When analyzing the language-related problems encountered by the participants while learning Turkish, the linguistic characteristics of Turkish (alphabet, pronunciation, and vocabulary limit) come to the forefront. Constraints result in practicing problems, lack of technology, and lack of guidance. Four categories of personal problems were identified: shyness, inability to concentrate, lack of readiness, and negative transfer.

Table 3 presents, as themes and categories, the opinions of convicted individuals who learn Turkish as a foreign language regarding the difficulties they face during the learning process.

Table 3

The Views of Convicts Who are Learning Turkish as A Foreign Language Concerning The Difficulties They Encounter in the Course of Turkish Learning

Themes	Categories	Participants
Language Related Problems	Linguistic Characteristics of Turkish	(P1, P2, P3, P4, P5, P7, P9, P10)
Problem Due to Constraints	Problem of Practice	(P1, P2, P5, P7, P8, P10)
	Lack of Technology	(P2, P3, P5, P6, P8, P9, P10)
	Lack of Guidance	(P2, P3, P7, P8, P10)
Personal Problems	Shyness	(P1)
	Inability to Concentrate	(P4, P7)

Themes	Categories	Participants
	Lack of Readiness	(P7) (P5)
	Negative Transfer	(P1, P3, P4, P8, P9)

In accordance with the analysis of the obtained data, the opinions of the convicts who learn Turkish as a foreign language regarding the difficulties they encounter in the process of learning Turkish are comprised of three subthemes: language-related problems, problems resulting from limitations, and personal problems. It is believed that eight of the participants (f=8) had linguistic difficulties due to pronunciation, word insufficiency, and alphabet. The following are examples of participant statements on the topic of language-related issues in the Turkish learning process:

> *"... We learned the Arabic alphabet in Iraq. I went to primary school there. The alphabet is different in Turkish..." (P1)*
> *"... I say some words inaccurately and write them wrongly." (P2)*
> *"... I make word mistakes when I speak. When I stop speaking, my mistakes increase." (P3)*
> *"I was speaking slowly and writing slowly. I'm not very fast now, but it's getting better. When I saw that I could succeed, my desire increased." (P4)*
> *"I had difficulty learning the alphabet...Some words are similar to each other. Some words are difficult to pronounce." (P5)*
> *"I was unfamiliar with the letters. Turkish words are difficult." (P7)*
> *"I had some difficulty at the beginning of the lessons. After I got used to the alphabet, I progressed easily. Some words are very difficult to pronounce." (P10)*

It is observed that the lack of technology is the most emphasized theme in the opinions of convicts who learn Turkish as a foreign language regarding the challenges they face (f=7). In addition, it is acknowledged that the problem of practice (f=6) and lack of guidance (f=5) are significant constraints during language learning process. The following are examples of participant comments on the topic of problems arising from constraints in Turkish language learning processes:

> *"There are rules in prison. Our teacher gives books, but there is nothing else... It is still good under prison conditions." (P2)*
> *"I can talk about technology. We learned things we didn't know in our class... Our teacher used to show photos and videos on the internet. We only have books in our rooms. It is necessary to do a lot of research when learning a language. There is no one to ask questions outside the classroom.'' (P3)*
> *"Materials are limited in the ward. Only what is allowed is allowed in. It would have been better if I had been outside when I was learning Turkish and had more Turkish friends."(P5)*
> *"...Being in prison is very difficult for preparing for lessons and doing research. It is bad not to be able to use a computer.'' (P6).*
> *"I don't have a friend in my ward that I can get support from. I fell behind my friends, I told our teacher that I was thinking of withdrawing from classes." (P7)*

"There is no use of computers and phones in prison contrary to outside. No one in our ward spoke Turkish.. These are difficult.'' (P8)
"We don't have any opportunities in prison except what is allowed, only books and notebooks. There is no telephone, internet, CDs." (P9)
"There is no one to help me with Turkish. I cannot ask about words, grammar,..., there is no one to ask questions... There is no technology." (P10)

In the context of convicts learning Turkish as a foreign language, focusing on their personal problems, the most prominent issue is negative transfer, which is highlighted significantly (f=5). This is subsequently followed by the categories of lack of readiness (f=2), inability to concentrate (f=2), and shyness (f=1). Negative transfer refers to the negative influence of the convicts' previous linguistic experiences on their acquisition of the Turkish language. Readiness encompasses both psychomotor aspects (like inability to hold a pencil) and cognitive aspects (such as unfamiliarity with the classroom setting and learning procedures). The inability to concentrate signifies the challenge of not being able to sufficiently concentrate on lessons due to longing for family or psychological concerns. Conversely, shyness refers to a limitation stemming from the introverted tendencies of the convicts, who tend to assume a passive role during lessons. Here are examples of statements made by participants regarding personal obstacles encountered during the process of learning Turkish as foreign national convicts:

"Although I speak Arabic, I don't know how to write. I didn't like school. I had to work because my father died. I have worked as a porter since I was a child..." (P7)
"I still write some letters incorrectly; sometimes I forget them." (P1)
"I was not used to the Turkish language; I can't pronounce some words... I had difficulty with the difference of the letters; it took me some time to get used to it... I am 37 years old... I thought I would not learn Turkish. Our teacher was patient with us. We talked and read a lot in the lessons... Some words are similar to Arabic." (P3)
"Frankly, there were times when I had difficulty. Arabic and Turkish are different from each other." (P5)
"The psychology of being in prison was reflected in my lessons. I was constantly thinking about my mom and dad." (P4)
"I attended Turkish lessons in this prison upon the invitation of our teacher. The lessons were different and difficult for me; I did not attend any school in my own country." (P7)
"I learned Turkish with difficulty. ... I have a shy nature. Although our teacher and classmates were very good, I could not be very close to anyone for a long time. I could not ask any questions in the lessons." (P4)

The difficulties encountered by detainees acquiring Turkish as a foreign language were categorized into three themes. In the interviews, it becomes clear that the problems that arise in the process of learning Turkish are primarily "problems due to constraints."

Discussion and Results

The research findings revealed that foreign convicts and detainees learn Turkish for reasons arising from force majeure, integration, social considerations, and future-oriented expectations. Force majeure is understood to manifest as humanitarian needs (official and private communication needs, daily needs, sharing-treatment needs, health-social-spiritual support needs, and economic needs) and legal needs. Reasons arising from integration include the attitudes of Turkish citizens, the need for belonging, and the need to adapt to prison life. The need to meet new people, acculturation, and education are characteristics of social and personal reasons. The reasons arising from future expectations are the desire to reside in Türkiye, the desire for early release, and familial responsibilities.

In the literature, numerous studies have been conducted with foreigners with varying social statuses and roles, including Turkish learners outside of Türkiye, refugees, university students, secondary school students, adults, foreign residents, and foreign football players toward the purpose of learning Turkish. Bölükbaş (2016), in his study with Syrian refugees, determined that the participants learned Turkish in order to study at a university in Türkiye, continue their lives, find a job, do their work more easily in official institutions, communicate better at workplaces, to communicate with their Turkish friends and neighbors, to learn Turkish culture and history, and to communicate with their friends. According to the findings of Tunagür and Kardaş (2021), Syrian students learn Turkish for various reasons, including living in Türkiye, being aware of the significance of learning a new language and the necessity of learning Turkish, receiving an education, loving Türkiye, assisting their families, and adapting to social settings. According to research conducted by Şahin (et al., 2021), refugee children enhanced their social relationships with their Turkish knowledge and were able to perform daily tasks with greater ease. In addition, refugee children's learning Turkish is important for families in matters such as education, employment, profession, and confidence in future. Yıldız and Sertoğlu (2019) conducted interviews with 26 Russian-speaking children and their families residing temporarily and permanently in Türkiye and concluded that parents learn Turkish for reasons including pursuing hobbies, staying updated with current events, interacting with neighbors and friends, familiarizing themselves with Turkish culture, receiving education, and fulfilling daily requirements and finding a job in Türkiye; children learn Turkish for these reasons as well as future-oriented expectations (finding a job, communicating with friends and neighbors in Türkiye). According to the findings of a study conducted by Gürbüz and Güleç (2016) with students studying in Türkiye, students learn Turkish for personal (to express their problems, to learn about different cultures, to love the Turkish language, to improve themselves), political and economic (to find a job, scholarships, etc.), social (to communicate with and get along with Turks), and educational reasons. Karatay et al. (2018) found that Bosnia and Herzegovina students learn Turkish for self-improvement, studying abroad, traveling abroad, finding a job abroad, and leisure activities. According to the results of Çelik and İpek (2019), Polish students learn Turkish for classroom communication, individual interests and requirements, education and employment opportunities, and commerce. Tok and Yıgın (2013) found that foreigners learn Turkish for economic, educational, tourism, political, and marriage-related reasons. In the study conducted by Başar and Akbulut (2016) in Tbilisi, Turkish learners learn the language for individual interests and requirements, education and employment opportunities, commerce, and classroom interaction. According to the study conducted in France by Güner and Kartal (2021), the objectives for learning Turkish are categorized as individual, academic, social, and economic. The results of this study coincide with those of the aforementioned studies in themes such as humanitarian needs, the need for belonging, getting to know new people, the need for education, the desire to live in Türkiye, familial responsibility, and future-oriented expectations. These are the basic humanitarian needs of every person in Türkiye. The findings of this study differ from the other studies in terms of legal needs, the need for adaptation to prison life, and the desire for early release. In reality, each situation and social context emphasizes its own requirements. For refugee children, these needs may include communication and play with their peers, whereas, for convicts and detainees, they may include communication with the penal facility staff (wardens, teachers, health officers, and the director) and meeting their daily basic needs.

Foreign national convicts and detainees in penal institutions have different context-specific reasons for learning Turkish, according to the findings of this study. They are required to learn Turkish due to the communication skills required for maintaining routine practices, shopping, transferring demands within and outside the institution, and comprehending instructions; sharing and healing needs resulting from being human; the needs for medical-spiritual-social support; and economic motives. Legal needs are an additional purpose for learning Turkish that immediately follows humanitarian needs. Foreign convicts and detainees are motivated to learn Turkish in order to become familiar with the Turkish legal system and to be able to follow the trial proceedings without feeling anxious.

Integration is one of the most essential reasons for foreign convicts and detainees to learn Turkish. The opinions of participants underscore the notion that foreign convicts and detainees require incorporation into institutional life. Those who have lived in a penal facility believe that acquiring Turkish is essential. Tucciarone (2018), in his study on teaching Italian as a second language in prison, states that teaching Italian to foreign convicts will contribute to integration and provide interpersonal communication skills such as empathy, sympathetic listening, and sharing.

Observations reveal that participants who are foreign convicts in Türkiye attach significance to learning Turkish as a means to connect with others, travel, engage in reading, listen to music, social interaction, struggle against discrimination, adjust to the prison environment, and improve a sense of belonging. Furthermore, motivations such as getting to know new people, acculturation, and the need for education are among the objectives of foreign convicts and detainees in learning Turkish.

There is no research found in the literature on the perspectives of foreign convicts and detainees regarding the purposes of learning Turkish and the difficulties they encounter during the process. According to Alyılmaz (2018), learning Turkish as a foreign language may be motivated by personal desire or necessity, and factors such as neighborhood relations, religious-military-commercial relations, migration, tourism, and education are among the primary reasons. The aforementioned determination is consistent with the terms integration necessity, social-personal reasons, and force majeure mentioned in this study in terms of the motivations for foreign national detainees and convicts to learn Turkish. However, when the topic is evaluated from the perspective of penal institution life, it becomes necessary to clarify the Turkish learning purposes of convicts and detainees with more specific reasons to address the issue specifically. This study objectifies the “force majeure” presented by Alyılmaz (2018) with respect to foreign convicts and detainees and deeply examines the reasons deriving from education.

The “future-oriented expectations” such as the desire to live in Türkiye, the desire for early release, and familial responsibilities are additional significant reasons for foreign convicts and detainees to learn Turkish. The issue of early recovery and early release, which was put into practice with the “Regulation on Observation and Classification Centers and Evaluation of Convicts” (Resmî Gazete, 2020), also known as the Good Conduct Regulation, is viewed as a significant source of motivation for foreign convicts to learn Turkish.

Researchers such as Açık (2008), Biçer (et al., 2014), Derman (2010), Er (et al., 2012), Candaş Karababa (2009), Korkmaz (2018), and Ünal (et al., 2018) have reached a variety of conclusions regarding the difficulties associated with teaching Turkish to non-native speakers. In these studies, issues regarding Turkish linguistic characteristics, language skills, methods-techniques, assessment-evaluation, teachers, and the surrounding environment were examined. The results of the aforementioned studies coincide with the "pronunciation, lack of vocabulary, negative transfer, and alphabet-related linguistic problems" identified as the second sub-problem of this study. In this study, the difficulties encountered by convicts learning Turkish as a foreign language were categorized into three themes. Problems arising from the linguistic characteristics of Turkish and personal issues point to similar categories for those in penal facilities as in other immigrants learning Turkish.

Analyzing the theme of language-related problems, it becomes apparent that foreign convicts and detainees typically experience linguistic difficulties due to their pronunciation, lack of vocabulary, and alphabet. It is believed that this situation is not unique to penal institutions and is similar to the general difficulties encountered in foreign language instruction (Açık, 2008; Biçer et al., 2014; Derman, 2010; Er et al., 2012; Korkmaz, 2018; Moralı, 2018; Tunagür&Kardaş, 2021; Ünal et al., 2018). Tunagür and Kardaş (2021) revealed in their study that Syrian students have difficulty learning Turkish due to adaptation, alphabet letter differences, linguistic characteristics, personal reasons, and lack of vocabulary. According to the findings of a study conducted by Gürbüz and Güleç (2016) with Turkish students studying in Türkiye, students struggle with grammar, terminology, and pronunciation. Ünal et al. (2018) determined that distinctions in the sentence structures of Turkish and Arabic cause difficulties for Syrian immigrants. According to Korkmaz (2018), Arabic-speaking students may have difficulty pronouncing sounds such as "ü, o, p, j, and c" in Turkish. These results align with the results of this study. In this regard, it can be said that the "language-related problems" identified in this study are consistent with previous research.

Apart from language-related problems, it is believed that "problems arising from limitations" are the most prominent problem identified in the Turkish language teaching activities conducted for foreign national convicts and detainees in this study. It is evident that the limitations-related issues are a lack of technology, practical issues, and guidance. Convicts face practical difficulties due to the fact that their language learning is limited to the classroom. Outside of the classroom, opportunities for systematic language practice are minimal. The problem of lack of a guide is related to the limitation of support that will help them learn Turkish, answer their questions, and guide the learning process outside the class hours. The lack of technology includes the lack of mobile phones, computers, tablets, internet, and interactive materials in the living environment of the convicts. According to Taşkın (2021), introducing a variety of materials in the instruction of Turkish as a foreign language can enhance the learning experience by appealing students' multiple senses. Nevertheless, due to certain constraints imposed by penal institutions' regulations, the use of technology-based multisensory learning materials is restricted, leading to diverse impacts on the language learning process.

Since convicts and detainees do not have access to a guide outside the classroom, a language-learner peer, or technological resources, learning Turkish as a foreign language is challenging for them. Furthermore, psychological issues, longing for family, and other distractions that may arise as a result of imprisonment are obstacles to the learning process.

As a result, Turkish language teaching in penal institutions is very important in terms of individual needs and social cohesion. However, inmates still experience many problems in the process of learning Turkish. The potential increase in the number of foreign national inmates in penal institutions requires more careful attention to Turkish language teaching in penal institutions.

Recommendations

- Foreign convicts and detainees should be encouraged to learn Turkish so that they can more easily integrate into the country and prison life, socialize, and fulfill their humanitarian and legal needs.
- In order for foreign convicts and detainees to more easily meet their legal needs and adapt to judicial processes and execution procedures, penal institutions should implement Turkish language instruction with a specific purpose.
- The technological transformation of penal execution institutions should be ensured, restrictions should be minimized in the name of educational activities, and if possible, controlled integration of out-of-class environments should be incorporated into education processes.
- The mechanism of good conduct and conditional release should be implemented for detainees who learn Turkish and adapt to the institution,

assuming they fulfill the other essential conditions, and the relevant system should be utilized in a functional way to reinforce learning Turkish.

Ethics Approval

The ethics committee permission for the article was given by the Yıldız Technical University Social and Human Sciences Research Ethics Committee at its meeting numbered 2023/08 on August 18, 2023.

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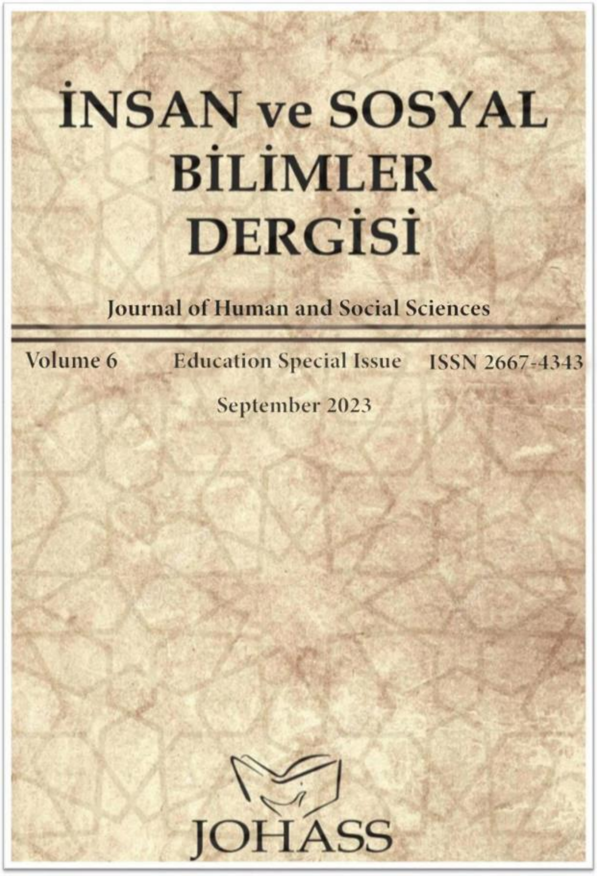

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Investigation of the Social Studies Curriculum of Türkiye and Italy in the Context of Citizenship Education: A Comparative Study

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Investigation of the Social Studies Curriculum of Türkiye and Italy in the Context of Citizenship Education: A Comparative Study

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Abstract **Research Article**

This study aims to compare the citizenship education in Italy and Türkiye in terms of knowledge, skills and values. In this context, the secondary school history, geography and citizenship education curriculum taught within the scope of the unidisciplinary social studies approach in Italy and the social studies course curriculum taught in Türkiye were examined. Comparisons were carried out at 4th, 5th, 6th, 7th and 8th grade levels. Content analysis method was used to analyze the data obtained, and the codes emerged as a result of the analyzes were presented in tables. In line with the results obtained, it is seen that Italy and Türkiye give weight to high-level thinking skills similar to the skills education dimension of citizenship education, and the programme being taught in Türkiye is more intense than the Italian curriculum in terms of value dimension; in both countries, diligence, respect, responsibility, patriotism, freedom/independence, solidarity, respect for cultural heritage and sensitivity values were emphasized; in the knowledge dimension, individual, social, cultural, economic, political, legal, historical, religious, professional, scientific, traditional and current issues were emphasized in Türkiye; in Italy, as well as these issues ecological citizenship and the European Union system were discussed. In line with the findings, suggestions were made to expand the scope of citizenship education in Türkiye with the dimensions of knowledge, skills and values, and to explicitly address the targeted skills and values in citizenship education in Italy.

Keywords: Citizenship education, social studies, Italy, Türkiye, comparative study

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Introduction

With the emergence of modern states, citizenship has gained a distinct conceptual meaning; throughout the historical process, it has undergone many changes along with the semantic need attributed to the concept of citizenship (Topçuoğlu, 2012). People coming together based on different needs and the needs felt for the governance of this unity has given rise to administrative structures (Bayrak, 2021, p.36). Administrative structures have laid the foundations of the concept of citizenship by linking various rules and limitations of responsibilities related to these rules to a fundamental variable. The concept of citizenship, based on the notion of the state, has been examined by philosophers such as Plato, Aristotle, Hobbes, Locke, and Rousseau in different periods of history (Çevikbaş, 2012). Political philosophy, which can be considered an independent discipline of philosophy, can be defined as a branch of philosophy that questions what the state is, how it should be in terms of its purpose, meaning, and the fundamental components that constitute it (Cevizci, 2013, p.432). In the context of clarifying the meaning attached to the concept of citizenship and understanding what citizenship represents in monarchical, oligarchic, or theocratic conceptions of government as a class power, political philosophy has filled a significant gap throughout history. The 18th and 19th centuries, when the era of empires was coming to an end and nation-states were beginning to emerge, served as a turning point for the reshaping of the concept of citizenship rooted in political philosophy (Korkut, 2014, p.11). However, even during these centuries when the class value of individuals began to change, Mussolini in Italy or the national government in Germany, who wanted to provide government by showing their personal-class interests as natural and legitimate with the understanding of hegemony, interrupted the natural development of the concept of citizenship (Şeker, 2022). In the 21st century, the citizen - a fundamental element of the state in the modern sense - has become a material of systematic and purposeful education to ensure the healthy and stable implementation of policies determined by state authorities (Ereş, 2015). The development of the understanding of sovereignty or the democratic rights related to the administrative power that citizens have created with a collective understanding can also be evaluated as a result of this process (Polat, 2011). In this regard, in today's world, the state's administrative understanding and the dominant perspective of the segment that supports it can direct the basic citizenship education understandings of the countries.

The changing perspectives on the concept of citizenship and the rapidly evolving needs of the present day have brought about significant changes in the education of the individual as well. The components that primarily influence this change in citizenship education can be listed as the recognition of schools' transformative role following the emergence of the modern state structure, the shift in the definition of identity from divine form to human form as the holder of sovereignty changes, and the transformation in the perspective towards children (Üstel, 2011, p.11). The traces of this change in the view of citizenship education in the West started to be seen in the Ottoman territories as well, beginning with the Tanzimat reforms and it was determined that the non-Muslim communities living there desired to be seen as "citizens" and have equal rights with the Muslim population, rather than being referred to as rayah; this situation led to the emergence of a new concept of citizenship (Eryılmaz, 2006, p.90). Globally, as the perspective on citizenship began to change in this century, it is observed that citizenship education curricula and courses have been included in the educational processes by governments. Following the collapse of the Ottoman Empire and the establishment of the Republic of Turkey, there is a wide range of courses related to citizenship education in the education history of the Turkish Republic. Malumat-ı Medeniye, Malumat-ı Medeniye and Ahlakiye, Musahabat-ı Ahlakiye, Medeniyye, History and Religion, State Knowledge, Citizenship, Country and Society Studies, National History, National Geography, and finally, Social Studies are courses that have been designed to impart citizenship competencies to individuals (Kaya and Biçer, 2021, p.8027). Similarly, in European countries such as Belgium, Romania, Estonia, Greece, Portugal, Sweden, the United Kingdom, the Czech Republic, Ireland, Latvia, Lithuania, Slovakia, France, Austria, Norway, and Bulgaria, citizenship education is taught as a separate subject at the primary, secondary, and tertiary education levels, while in other European countries whose names are not mentioned, the citizenship education is carried out in an integrated way with other courses (Uğurlu, 2011, p.159). Especially in the European Union countries, the importance given to citizenship education coincides with the objectives of preserving the strategic and political importance and ensuring the long-term permanence of the union. On the other hand, the terrorist attacks in European cities such as Paris and Copenhagen in 2015 resulted in the signing of the Paris Declaration between the European Union Ministries of Education and the European Commission; Within the scope of this declaration, it is aimed to increase the role of educational processes in citizenship education, to take action nationally, regionally and locally within the scope of the issue and thus to strengthen the understanding of freedom and tolerance (Eurdice, 2017, p.3). However, despite Europe's goal of strengthening the understanding of freedom and tolerance, there are still many problems in this regard in different geographies today. With these developments, citizenship education and human rights training requirement has been put into effect in EU member countries, and citizenship education has become a qualification issue within the scope of teacher training. This process has brought about changes in the functioning of education systems and the scope of citizenship education in schools in many European countries. One of the countries affected by this change process is Italy, which is of strategic importance for the European Union and is one of the founding members of the Union. In 2015, Italy made significant innovations in the structure and content of its curricula at all levels of the education system, from pre-school education to adult education. Due to reasons such as decisions taken in the Paris Declaration and the fact that EU countries are seen as a center of attraction with the increasing globalization day by day, the need of Italy, which is a Mediterranean coastal country, to produce integration policies regarding irregular immigrants from Africa, the aging of the population due to the decrease in the population growth rate, and possible labor agreements due to the need for young workers, the Italian state started a radical change in citizenship education in 2020. The social events that have led to the change in the understanding of citizenship education in European countries especially in Italy similarly affect Turkey. However, citizenship education in Turkey experienced a turning point during the Helsinki Summit in 1999, and with the reforms implemented following the country's status as a candidate for the European Union, the Citizenship and Human Rights course was abolished in 2005, and although it was reintroduced as a course in 2010, it couldn't be sustained in the long term (Şen, 2019, p.7). As a result, it can be stated that the basic citizenship education foreseen by this process is based on its integration with other courses.

When the historical course of the education systems of different countries is examined, it is seen that there have been many changes in the structure of educational institutions and educational levels. The opening of different types of schools, the inclusion of new courses in the system, and the renewal of the curriculum are some of these changes. The social studies course has also gone through various phases with this change over the years. Together with the basic structure of education that tries to prepare the individual for social life, the social studies course has become a critical course for citizenship education, especially since 2018. It can be stated that with the renewed Social Studies Curriculum in 2018, citizenship education has become a part of social studies education. In this context, it can be said that citizenship education is once again included in the renewed social studies curriculum, especially with the learning areas of active citizenship and global connections.

When the literature is examined, it is seen that there are comparative studies with Turkey in different scopes regarding citizenship education. The book Citizenship and Citizenship Education in the 21st Century, edited by Öztürk, İbrahimoğlu and Yıldırım (2020), deals with citizenship education from different aspects. In a study conducted by Bektaş and Zabun (2019), comparing citizenship education in Turkey and France in terms of its values dimension, it was determined that democratic values stood out the most in both countries. In a study by Dere and Akdeniz (2021) comparing citizenship education in the Ontario province of Canada and Turkey, it was stated that citizenship education in the Ontario province of Canada focused more on local-national-global dimensions, while in Turkey, an educational process was envisioned regarding citizens' qualities and responsibilities. In a comparative study conducted by Akhan and Çiçek (2019) between Turkey and Russia, it was found that Russian students' perceptions of citizenship were universally identified, while Turkish students' perceptions of good citizenship were more nationally characterized. In addition to comparative studies, there are various studies available on different scopes of citizenship education including the study by Yetişensoy and Akdeniz (2022) on citizenship education in Japan, the study by Uğurlu (2011) on citizenship education in EU member countries, and the study by İbrahimoğlu and Şan (2018) on the analysis of citizenship education in Azerbaijani curriculum. On the other hand, there are comparative studies that address citizenship education from various dimensions in Italy, as well as studies specifically focused on citizenship education within the Italian education system. In a study conducted by Sanchez et al. (2023), education systems in Spain and Italy were examined in terms of intercultural education policies. The study emphasized the need for Europe-focused citizenship measures to address the social acceptance of migrants. In Damiani's study (2020), emphasis was placed on the importance of educating teacher candidates about global citizenship. In Franch's study (2019), it was mentioned that globalization has brought about changes that affect the concept of citizenship. Despite the increasing research on citizenship education, no comparative study has been found that specifically examines citizenship education in Italy and Turkey. In citizenship education conducted in European countries, it is observed that most EU countries emphasize global citizenship and European citizenship. However, there is no definitive study that identifies the specific citizen qualities envisioned by these objectives within the scope of citizenship education. Italy's representation in the EU and its significant influence, recent changes in citizenship education, and the absence of any study on Italy's citizenship education in the national literature can be considered as motivations for the emergence of this study. In this regard, the results of the comparison of citizenship education carried out in Turkey with the countries experiencing transition periods regarding citizenship education have been a matter of curiosity. In this study, the question "What kind of citizen is desired to be raised in Turkey's social studies curriculum and social studies curriculum (history, geography, and citizenship education courses) in Italy" constitutes the problem situation of the study. In this regard, the study seeks answers to the following sub-questions:

1. What knowledge is expected to be possessed by citizens in the social studies curriculum of Turkey and the history, geography, and citizenship education curricula of Italy?
2. What skills are expected to be possessed by citizens in the social studies curriculum of Turkey and the history, geography, and citizenship education curricula of Italy?
3. What values are expected to be possessed by citizens in the social studies curriculum of Turkey and the history, geography, and citizenship education curricula of Italy?

Method

This section presents information about the research design, the data collection tools employed, and the analysis of the study data.

Research Design

The study was carried out in line with the basic qualitative research paradigm and the curriculum of history, geography, and citizenship education courses, which are the equivalent of social studies in Italy, and the curriculum of Turkish social studies courses was examined by the document analysis method. In this study, the curriculum of history, geography, and citizenship education courses within the context of the unidisciplinary social studies approach in Italy and the social studies curriculum taught in Turkey have been comparatively analyzed in terms of citizenship education. In this regard, the desired citizen profile to be raised through citizenship education in both countries has been examined in terms of knowledge, skills, and values dimensions. The desire for an in-depth examination of the curriculum of Turkey and the EU country Italy concerning the phenomenon of citizenship has been a key factor in determining the fundamental qualitative research method for this study. In this context, the document analysis method, which is considered a data collection method in qualitative research or a primary independent research method, forms the design of the study (Sak et al., 2021, p.241).

Data Collection Method

In Italy, social studies is taught as a history and geography course with a unidisciplinary approach. In addition, there is a basic curriculum prepared for citizenship education. In the Italian education system, schools are granted the authority to organize lessons in a way that does not exceed 20% of the total class hours. However, with the renewed understanding of citizenship education, it has been stipulated that the courses related to citizenship education throughout the country should not be less than 33 course hours per year. The published curriculum on citizenship education in Italy is expected to be covered in all courses except for independent course hours to be held in this context. Therefore, the curricula of the History and Geography course taught within the scope of the social studies course, which fulfills an important function for the scope of citizenship education in Italy, and the Citizenship Education Curriculum, which is published as a framework program, have been selected as the main instruments of the data collection process. The other axis in this comparative study is the Turkish Social Studies Curriculum. The curricula of both countries were accessed from the official websites of the ministries of education (Ministero dell'Istruzione e del Merito [MIUR], 2020; MIUR, 2022a; MIUR, 2022b; MEB, 2023). The Turkish translation process of the history and geography course curriculum and the citizenship education framework program taught within the scope of the social studies course in Italy was carried out by an independent researcher and the opinions of a Turkish teacher working in Italy were obtained regarding the translation. Support was obtained from a language specialist who provides Italian-Turkish and Turkish-Italian translation services to address differences in opinions regarding the Turkish equivalents of certain expressions. Information about the examined curricula is presented in Table 1.

Table 1

Data Collection Tools

Name of the Curriculum	Year
Corso di storia dell'Italia (History Curriculum)	2022
Corso di geografia dell'Italia (Geography Curriculum)	2022
Linee guida per l'insegnamento dell'educazione civica in Italia (Directive on the Teaching of Citizenship)	2020
Social Studies Curriculum of Turkey	2023

Analysis of Data

In this study designed as document analysis, the content analysis method was employed for analyzing the data obtained from the examined curricula. The content analysis method provides an in-depth examination of the obtained data. In this process, the coding of frequently emphasized expressions within the obtained data leads to the creation of categories, and these categories help to reach themes (Baltacı, 2019, p.10). In this study that examines what kind of citizen is aimed to be raised within the scope of citizenship education in social studies curricula of Italy and Turkey, the prominent citizenship attributes in the curricula of both countries have been attempted to be identified. Before the process of coding the data obtained from the curricula, the data set is divided into three sections subject/skill/value. At the end of the examinations made regarding the knowledge/subjects, skills, and values that both countries expect from their citizens, codings were carried out, categories were reached in line with the codes and the targeted citizen characteristics were revealed in line with the results obtained. The coding process was carried out separately by two researchers, and the findings obtained as a result of the analysis were compared and the consensus codes were combined. Miles and Huberman formula was used for reliability calculation and reliability was calculated as 89%. At the end of the data set analysis process, the resulting codings and the data sets that originate these encodings were shown to an independent expert researcher, and their opinions were obtained. Following expert critique aimed at consolidating certain codes, refining categories, and ensuring internal and external consistency, necessary adjustments were made, some codes and categories were differentiated, and the data analysis process was completed.

Findings

Findings Related to The First Research Question: Knowledge

The findings regarding which knowledge/subjects' students are expected to be citizens who have a good command of in the Social Studies Curriculum in Turkey are shown in Table 2.

Table 2

Knowledge/Subjects Expected to be Possessed by Citizens in the Turkish Social Studies Curriculum

Code	Grade	Code	Grade
Disasters	4	Institutions/administrative units/international organizations	5-7
Getting to know one's family/environment and oneself.	4	Global issues	7
Atatürk and his contributions to Turkish democracy	7	Professions / professional ethics	5- 6- 7
Developments in Europe (geographical discoveries, etc.)	7	National culture/cultural elements/natural and historical sites	4- 5- 6
Contribution of scientists/Turkish-Islamic scholars to science	5-7	National struggle and its heroes/national independence	4
Environmental issues	5	Ottoman State and Culture	7
Economy and economic activities	4- 5- 6	Politics/governance/participation/democracy and its social impact	6-7
Active citizenship	5	Accuracy/security/reliability in a virtual environment	5
Physical/human/economic geography	4- 5- 6- 7	Social sciences/scientific activities	5
Traditional and modern children's games	4	T.R. State powers/basic characteristics	6-7
Causes and consequences of migration	7	Use of technology/technology products/inventors	4- 5- 7
Rights/responsibilities/social roles	4- 5- 6- 7	Tourism/country resources	5-6
Weather/climate phenomena	4-5	Different cultures nationally and internationally	4-5
Communication/media	7	Countries/Neighboring Countries/Turkic Republics	4- 5- 6
The birth of Islam/Turks' acceptance of Islam/Turks' adoption of Anatolia as their homeland	6		

As can be seen in Table 2, in the Turkish Social Studies Curriculum, students are expected to have a command over the following knowledge/subjects as citizens: Disasters (4th grade), getting to know one's family/environment and oneself (4th grade), Atatürk and Atatürk's contributions to Turkish democracy (7th grade), developments in Europe (geographical discoveries, etc.) (7th grade), Contribution of scientists/Turkish-Islamic scholars to science (5-7th grade), environmental problems (5th grade), economy and economic activities (4-5-6th grade), active citizenship (5th grade), physical/human/economic geography (4-5-6-7th grade), traditional and modern children's games (4th grade), causes and consequences of migration (7th grade), rights/responsibilities/social roles (4-5th-6th-7th grade), weather/climate phenomena (4th-5th grade), communication/media (7th grade), birth of Islam/acceptance of Islam by Turks/adoption of Anatolia as their homeland (6th grade), institutions/administrative units/international organizations (5-7th grade), global problems (7th grade), professions/professional ethics (5-6-7th grade), national culture/cultural elements/natural and historical sites (4-5-6th grade), National Struggle and its heroes/national independence (4th grade), Ottoman State and culture (7th grade), politics/governance/participation/democracy and its social impact (6-7th grade), accuracy/security/reliability in virtual environment (5th grade), social sciences/scientific activities (5th grade), T. R. State powers/basic characteristics (6-7th grade), use of technology/technology products/inventors (4-5-7th grade), tourism/country resources (5-6th grade), national and international different cultures (4-5th grade), and countries/neighboring countries/Turkic Republics (4-5-6th grade).

Table 3

Knowledge/Subjects Expected to Be Possessed by Citizens in the Italian Social Studies (History, Geography, and Citizenship Education) Curriculum

Category and Code	Grade
History	
Research process/principles/steps	7-8
Concepts such as geographical discoveries/feudalism/lordship/bourgeoisie	6
Ecological/intercultural problems/culture of coexistence	6
Ideologies such as Fascism, Nazism, Nationalism, Socialism, etc.	8
States/civilizations that have existed from past to present	6-7
Dynamics between human-environment-event	7
Chronological/temporal; economic/religious/legal concepts and events	7-8
The importance of cultural heritage	6-8
Napoleonic Wars/Fall of Napoleon	7-8
The Roman Empire and its disintegration, the migration of tribes	6
The concept of the Renaissance and the effects of the Renaissance	6-7
Use of historical texts/written and oral production	6- 7- 8
Economic, sociological (migration) events within the history	8
Social problems	8
Balances in Europe as a result of the wars	8

Local history/Italian history/European history/world history	6- 7- 8
Geography	
Using information	8
Characteristics of different regions	6-7
Producing graphics	6- 7- 8
Today's world problems using graphs	8
Mapping and its use/scaling	6- 7- 8
Human-environment relationship/problems/change	6- 7- 8
Reading statistics/graphs/weather phenomena (climate)	6-7
The position/situation of Italy vis-à-vis other states	8
Citizenship Education	
Values/duties/procedures of the EU and international legal systems	6- 7- 8
Digital citizenship principles for democratic life	6- 7- 8
Basic elements of law and democratic living values/rules	6- 7- 8
First aid/solutions to hazards	6- 7- 8
Constitutional and administrative structure of Italy	6- 7- 8
Corporate and social rules/values	6- 7- 8
Sustainable development	6- 7- 8
Attitude and skills	6- 7- 8
Civic duties	6- 7- 8

As can be seen in Table 3, in the History Course Curriculum of Italy, which is the equivalent of the Social Studies course, students are expected to have a command over the following knowledge/subjects as citizens: research process/principles/steps (7-8th grade), geographical discoveries/feudalism/lordship/bourgeoisie (6th grade), ecological/intercultural problems/culture of coexistence (6th grade), ideologies such as Fascism, Nazism, Nationalism, Socialism, etc. (8th grade), states/civilizations that have existed from past to present (6-7th grade), dynamics between human-environment-event (7th grade), chronological/temporal; economic/religious/legal concepts and events (7-8th grade), the importance of cultural heritage (6-8th grade), Napoleonic Wars/Napoleon's fall (7-8th grade), Roman Empire and its disintegration, Migration of Tribes (6th grade), the concept of the Renaissance and the effects of the Renaissance (6-7th grade), use of historical texts/written and oral production (6-7-8th grade), economic, sociological (migration) events in history (8th grade), social problems (8th grade), the balances formed in Europe as a result of the wars (8th grade), and local history/Italian history/European history/world history (6-7-8th grade).

As can be seen in Table 3, in the Geography Course Curriculum, which is the equivalent of the Social Studies course in Italy, students are expected to have a command over the following knowledge/subjects as citizens: Using information (8th grade), characteristics of different regions (6-7th grade), producing graphs (6-7-8th grade), today's world problems using graphs (8th grade), mapping and its use/scaling (6-7-8th grade), human-environment relationship/problems/change (6-7-8th grade), reading statistics/graphs/weather phenomena (climate) (6-7th grade), Italy's position/situation vis-à-vis other states (8th grade).

As can be seen in Table 3, in the Citizenship Education Course Curriculum, which is the equivalent of the Social Studies course in Italy, students are expected to have a command over the following knowledge/subjects as citizens: Values/duties/procedures of the EU and international legal systems (6-7-8th grade), digital citizenship principles for democratic life (6-7-8th grade), basic elements of law and democratic living values/rules (6-7-8th grade), first aid/solutions to hazards (6-7-8th grade), the constitutional and administrative structure of Italy (6-7-8th grade), corporate and social rules/values (6-7-8th grade), sustainable development (6-7-8th grade), attitudes and skills (6-7-8th grade), civic duties (6-7-8).

Findings related to the second research question: Skills

Table 4

Skills Expected to be Acquired by Citizens in the Turkish Social Studies Curriculum

Code	Grade	Code	Grade
Explanation/establishing a cause-effect relationship	4- 5- 6-7	Recognizing/questioning stereotypes and prejudices	5- 6- 7
Analysis/Classification	4- 5- 6-7	Using evidence	4-7
Research	4- 5- 6-7	Decision making	4-7
Scientific Thinking	5	Comparison	4- 5- 6
Environmental literacy	4- 5- 6	Comprehension	4-7
Inference	4- 6- 7	Understanding oneself/one's abilities, and examining/developing one's development.	4-5
Evaluation	5-7	Position analysis/sketching	4
Perceiving change and continuity	4- 5- 6-7	Chronological ordering/Detecting time and chronology	4- 6- 7
Digital literacy	5-7	Media literacy	5-7
Critical thinking/questioning	5- 6- 7	Detecting space	4- 5- 6
Empathy	4	Self-control	4-5
Financial/economic literacy	4- 5- 6	Political literacy/Exercising rights/participation	5- 6- 7
Visual literacy	4	Problem solving	7
Entrepreneurship	5-6	Social participation	4- 5- 6
Observation	4-5	Recognition/Awareness	4- 5- 6-7
Using and producing maps/tables/charts	4- 5- 6-7	Introduce	4-5
interpretation (map literacy)		Discussion	5-7
Legal literacy	5-6	Effective/correct use of technology/technology literacy	4- 5- 6
Communication	7	Using Turkish correctly, beautifully, and effectively	5-6
Examination	5	Creativity/Innovation	4- 5- 6
Cooperation	4- 5- 7	Using evidence	4-7

As can be seen in Table 4, a total of forty-one (41) skills were reached in Social Studies 4th, 5th, 6th, and 7th grade achievements. The skills expected to be acquired by individuals/citizens are as follows: Explanation/establishing a cause-effect relationship (4-5-6-7th grade), analyzing (4th-5th-6th-7th grade), research (4th-5th-6th-7th grade), scientific thinking (5th grade), environmental literacy (4-5-6th grade), inference (4-5-6-7th grade), evaluation (5-7th grade), perceiving change and continuity (4-5-6-7th grade), digital literacy (5-7th grade), critical thinking (5-6-7th grade), empathy (4th grade), economic literacy (4-5-6th grade), visual literacy (4th grade), entrepreneurship (5-6th grade), observation (4-5th grade), map literacy (4-5-6-7th grade), legal literacy (5-6th grade), communication (7th grade), examination (5th grade), cooperation (4-5-7th grade), recognizing stereotypes and prejudices (5-6-7th grade), decision-making (4-7th grade), comparison (4-5-6th grade), comprehension (4-7th grade), self-knowledge (4-5th grade), position analysis/sketching (4th grade), chronological ordering/perceiving time and chronology (4-6-7th grade), media literacy (5-7th grade), space perception (4-5-6th grade), self-control, political literacy/exercising their rights/participation (5-6-7th grade), problem solving, social participation (4-5-6th grade), recognition/awareness(4-5-6-7th grade), introduce, discussion (5-7th grade), effective/correct use of technology/technology literacy (4-5-6th grade), using Turkish correctly, beautifully and effectively (5-6th grade), creativity/innovation (4-5-6th grade), and using evidence (4-7th grade).

The skills explicitly given in the curriculum are research, environmental literacy, perceiving change and continuity, digital literacy, critical thinking, empathy, financial literacy, entrepreneurship, observation, map literacy, legal literacy, communication, cooperation, recognizing stereotypes and prejudices, using evidence, decision making, location analysis, media literacy, space perception, self-control, political literacy, problem-solving, social participation, drawing and interpreting tables/graphs and diagrams, using Turkish correctly, beautifully and effectively, innovative thinking, and to perceive time and chronology.

Table 5

Skills Citizens Expected to Have in the Italian Social Studies (History, Geography, Citizenship Education) Curriculum

Category and Code	Grade
History	
Research	7-8
Building knowledge	6- 7- 8
Inference-creative thinking	8
Evaluation	8
Using digital resources	6- 7- 8
Using different types of resources	6- 7- 8
Using maps/diagrams/tables/graphs/reading/producing (literacy)	6- 7- 8
Making comparisons	6- 7- 8
Understanding/explaining/comprehending/using concepts	6- 7- 8
Text literacy (reading-summarizing and producing texts)	6- 7- 8
Establishing/defining cause and effect relationships	6-7
Problem-solving (environmental problems/intercultural problems)	6
Social participation	6- 7- 8
Comprehend social, cultural, and religious transformations	7
Using a date/timeline	6- 7- 8
Discussion	8
Interpretation	7
Understanding time and chronology	6- 7- 8
Geography	
Research	8
Evaluation	8
Perceiving change and continuity	6- 7- 8
Reading/analyzing/producing photo/satellite imagery/ground/weather phenomena (Visual literacy-geography literacy)	6- 7- 8
Map/diagram/table/statistical data/graph using/reading/producing (map and data literacy)	6- 7- 8
Making comparisons	6- 7- 8
Analyzing/solving problems	6- 7- 8
Presentation	8
Citizenship Education	
Analyzing	6- 7- 8
Communicating with friends/circles	6- 7- 8
Identifying similarities and differences	6- 7- 8
Using information	6- 7- 8
Digital citizenship competency	6- 7- 8
Using language correctly/effectively	6- 7- 8
Expressing emotions effectively	6- 7- 8
Ensuring active participation in education and training	6- 7- 8
Critical thinking	6- 7- 8
Using the effective method of work	6- 7- 8
Understanding different perspectives	6- 7- 8
In-group and out-group discussion	6- 7- 8
Cooperation	6- 7- 8
Planning tasks/Effective time management	6- 7- 8
Participation	6- 7- 8
Using resources correctly	6- 7- 8
Organizing their own learning / self-control	6- 7- 8
Control	6- 7- 8
Positive participation in cultural discussions	6- 7- 8
Defining the relationship between events/relationships	6- 7- 8

Taking initiative in problem-solving/using personal strategies and different methods	6- 7- 8
Following procedural principles	6- 7- 8
Designing	6- 7- 8
Ability to make conscious choices	6- 7- 8
Communicating in foreign languages	6- 7- 8

As can be seen in Table 5, 18 skills have been reached in the acquisition of the history curriculum, 8 skills in the acquisition of the geography curriculum, and 25 skills in the acquisition of the citizenship curriculum.

According to Table 5, in the Italian History Course Curriculum the students/citizens are expected to acquire the following skills: research (7-8th grade), building knowledge (6-7-8th grade), making inferences-creative thinking (8th grade), evaluation (8th grade), using digital resources (6-7-8th grade), using different types of resources (6-7-8th grade), using maps/diagrams/tables/graphs/reading/producing (literacy) (6-7-8th grade), making comparisons (6-7-8th grade), understanding/explaining/comprehending/using concepts (6-7-8th grade), text literacy (reading-summarizing and producing texts) (6-7-8th grade), establishing/defining cause and effect relationships (6-7th grade), problem solving (environmental problems/intercultural problems) (6th grade), social participation (6-7-8th grade), comprehending social, cultural and religious transformations (7th grade), using a date/timeline (6-7-8th grade), discussion (8th grade), interpretation (7th grade), and understanding time and chronology (6-7-8th grade).

The skills that citizens are expected to have in the acquisitions included in the Italian Geography Curriculum are as follows: research (8th grade), evaluation (8th grade), perceiving change and continuity (6-7-8th grade), reading/analyzing/producing photography/satellite imagery/ground/weather phenomena (visual literacy and geography literacy) (6-7-8th grade), map/diagram/table/statistical data/using graphs/reading/producing (map and data literacy) (6-7-8 grade), making comparisons (6-7-8th grade), analyzing/solving problems (6-7-8th grade), and making presentations (8th grade).

The skills expected from citizens in the Citizenship Education Curriculum of Italy are as follows, across all grades (6th, 7th, and 8th grades) and programs: analyzing, communicating with friends/environment, identifying similarities and differences, using information, digital citizenship competence, using language correctly/effectively, expressing emotions effectively, actively participating in education, critical thinking, using an effective working method, understanding different perspectives, discussing within and outside the group, cooperation, planning tasks/effective time management, participation, using resources correctly, organizing their own learning/self-control, control, positive participation in cultural discussions, defining the relationship between events/relationships, taking initiative in problem-solving/using personal strategies and different methods, following procedural principles, designing, making conscious choices, and communicating in foreign languages.

Findings related to the third research question: Values

Table 6

Values Expected to Be Possessed by Citizens in the Turkish Social Studies Curriculum

Code	Grade	Code	Grade
Giving importance to family unity	4-5	Equality	6
Peace	7	Active citizenship	5
Independence	4-5	Awareness	4
Scientific Ethics	5	Safety	4-5
Scientificness	4- 5- 6-7	Sensitivity to cultural heritage	4- 5- 7
Respect for individual differences	4	Freedom	5-7
Diligence	5-7	Respect	4-7
Solidarity/Unity and togetherness	5- 6- 7	Conscientiousness	4- 5- 6-7
Sensitivity to the natural environment	4- 5- 6	Saving	4
Honesty	5-7	Patriotism	4- 5- 6
Aesthetic	5-7	Charity	6

As can be seen in Table 6, there are twenty-two (22) values expected to be possessed by individuals/citizens in the 4th, 5th, 6th, and 7th grade achievements of the Turkish Social Studies Course Curriculum. These values are; giving importance to a family unity (4-5th grade), peace (7th grade), independence (4-5th grade), science ethics (5th grade), scientificness (4-5-6-7th grade), respect for individual differences (4th grade), diligence (5-7th grade), solidarity/unity and togetherness (5-6-7th grade), sensitivity to the natural environment (4-5-6th grade), honesty (5-7th grade), aesthetics (5-7th grade), equality (6th grade), active citizenship (5th grade), awareness (4th grade), safety (4-5th grade), sensitivity to cultural heritage (4-5-7th grade), freedom (5-7th grade), respect (4-7th grade), conscientiousness (4-5-6-7th grade), saving (4th grade), patriotism (4-5-6th grade), and charity (6th grade).

The values clearly stated in the Social Studies Curriculum are; justice, giving importance to family unity, independence, peace, scientificness, diligence, solidarity, sensitivity, honesty, aesthetics, equality, freedom, respect, love, responsibility, savings, patriotism, and charity.

Table 7

Values Expected to Be Possessed by Citizens in the Italian Social Studies (History, Geography, and Citizenship Education) Curriculum

Category and Code	Grade
History	
Importance to cultural heritage	8
Geography	
-	
Citizenship Education	
Independent work	6- 7- 8
Conscious choice	6- 7- 8
The legality of individual and social action	6- 7- 8
Diligence	6- 7- 8
Respect for the environment	6- 7- 8
Protecting the environment/perimeter safety	6- 7- 8
Solidarity	6- 7- 8
Awareness of values and rules of democratic life	6- 7- 8
Democratic life	6- 7- 8
Physical/psychological/moral/sociological well-being	6- 7- 8
Reality	6- 7- 8
Concentration	6- 7- 8
Respectful observance of rules	6- 7- 8
Respect for cultural heritage	6- 7- 8
Respect for common public goods	6- 7- 8
Autonomy	6- 7- 8
Responsibility	6- 7- 8
Patriotism	6- 7- 8

As can be seen in Table 7, the Social Studies (History/Geography/Citizenship Education) curriculum of Italy explicitly includes nineteen (19) values in its achievements. Among these values, 18 of them are included in the Citizenship Education curriculum and 1 is in the History curriculum. No value statement has been reached in the achievements of the geography curriculum. However, the values in the Citizenship Education curriculum are expected to be gained in all other courses.

As can be seen in Table 7, the value in the History curriculum that is expected from its citizens is the value of the importance of cultural heritage. The values contained in the citizenship education curriculum, which is intended to be included in other courses in the country (grades 6-7-8) are as follows: independent work, conscious choice, legality of individual and social action, diligence, respect for the environment, protection of the environment/perimeter safety, solidarity, awareness of values and rules for democratic life, democratic life, physical/psychological/moral/sociological well-being, reality, concentration, respectful observance of rules, respect for cultural heritage, respect for common public goods, autonomy, responsibility, and patriotism.

Discussion and Results

Social Studies is a curriculum that emerged with a focus on citizenship education and continues this mission today. The Social Studies curricula of the countries are structured using interdisciplinary, multidisciplinary, or unidisciplinary approaches. It has been observed that the Social Studies Curriculum in Turkey (MEB, 2023) is structured with an interdisciplinary approach. In Italy, it was concluded that the subjects within the scope of social studies were structured in three separate courses such as history, geography, and citizenship education with a unidisciplinary program approach. In this study, the question "What kind of citizen is desired to be raised in the social studies curriculum of Turkey and Italy?" has been investigated. For this purpose, the curriculum of the Social Studies Course being implemented in Turkey and the curriculum of the History, Geography, and Citizenship Education courses being applied in Italy were examined. In the study, a total of four curricula were evaluated in the context of the citizenship characteristics that are desired to be raised. In other words, the characteristics of the competent citizen defined and aimed to be raised in the curriculum in Turkey and Italy have been attempted to be identified. Effective citizenship entails individuals in democratic societies possessing the necessary attributes of citizenship in terms of knowledge, skills, and values (National Council for Social Studies [NCSS], 2010). Therefore, in line with the purpose of the study, the knowledge, skills, and values expected from citizens in the Social Studies curriculum of Turkey and Italy were examined comparatively.

In the Social Studies Curriculum of Turkey, it is expected that citizens gain knowledge about individual, societal, cultural, economic, political, legal, historical, religious, professional, scientific, traditional, and contemporary issues, media, citizenship, and national and international matters. In Italy's History, Geography, and Citizenship Education curriculum, citizens are expected to have knowledge about individual, social, cultural, ecological, citizenship, and national and international issues. In Italy, it is also expected to know the European Union system and values. In Italy, it is observed that concepts are more emphasized, and topics are approached through concepts, terms, and trends. Bianchi (2009) concluded that individual, social, cultural, ecological, citizenship, national and international issues, and issues related to the European Union were included in the curriculum of courses for social sciences such as History, Geography, and Citizenship Education. Bianchi's (2009) study supports the findings of this study. Foppa (2005) stated that the Italian education system includes issues related to Italy, Europe, and the whole world. These statements by Foppa (2005) also support the findings of the present study.

When the curriculum of Turkey and Italy is compared, it is seen that the Social Studies Course Curriculum (MEB, 2023) applied in Turkey aims to provide students with a lot of knowledge about Islamic history. However, it is concluded that the achievements of the History, Geography, and Citizenship Education curricula in Italy do not include any information related to the history of Christianity. In this regard, it can be stated that the curricula of Turkey and Italy differ. It can be stated that the Social Studies Course Curriculum being implemented in Turkey aims to educate citizens who know the history of Islam. On the other hand, when the achievements of the History, Geography, and Citizenship Education curricula implemented in Italy are examined, it is seen that there is no concern about teaching the history of Christianity. However, textbooks should also be examined to make a clear judgment regarding this situation.

It is understood that this information in the Social Studies Course Curriculum in Turkey is organized for the purpose of history education rather than religious education. Therefore, it can be stated that the curriculum is formed on a secular understanding. Similarly, it can be stated that the curricula of Italy are organized with a secular understanding. It will also be useful to examine the current situation of the curricula taught within the scope of Social Studies courses in other European countries in this regard. For instance, in France, a European Union country similar to Italy, it is observed that the History-Geography Curriculum also exhibits a similar situation to that in Turkey. In the France History-Geography curricula, the origins of all monotheistic religions have been narrated, and fundamental information about these religions has been provided. This does not mean that the History-Geography Curriculum being implemented in France is not secular. Because the information about the history education of all the monotheistic religions (Judaism, Christianity, and Islam) is given equal space (Kara, 2022; Kara and Tokmak, 2023). It is seen that the curricula of Social Studies, History, and Geography courses applied in Germany are also organized with a secular understanding. It was determined that in the History Curriculum of Germany, the origins of all monotheistic religions are addressed for the purpose of history education (Eurydice, 2017). In this regard, when Turkey, Italy, Germany, and France are compared, it can be stated that the country that gives the most space to the history of religion in the curriculum is France, and the country that does not include it at all is Italy. However, it can be stated that the curricula of all four countries are organized with a secular understanding. Apart from this, it can be stated that the information expected to be possessed by citizens in Turkey and Italy's Social Studies curricula is generally similar. Tacconi (2009) concluded that the History Course Curriculum implemented in Italy has a secular structure. The findings of the study conducted by Tacconi (2009) support the results of this study.

Skills and values are clearly stated in the Turkish Social Studies Course Curriculum. However, it is seen that skills and values are not clearly stated in the Italian History, Geography, and Citizenship Education curricula. In the study, while explicitly mentioning the skills and values stated in the Turkish Social Studies Curriculum, each acquisition in the Turkish and Italian curricula has also been analyzed in terms of skills and values. However, only the expressive examination of the acquisitions of the curricula is incomplete or insufficient. Therefore, it may be more useful to examine textbooks and teacher guidebooks in terms of skills and values.

When the acquisitions in Italian and Turkish Social Studies curricula are examined, it is understood that the skills are more weighted in both curricula. Therefore, it is considered that it may be more beneficial to include skills clearly in the curricula. Because individuals can acquire 21st-century skills in a much more disciplined way through education. The most significant tool for imparting the skills required by the 21st century through education in lessons is the curriculum. In this regard, it can be stated that the skills to be imparted should be explicitly included in the curricula (Otuz, Görkaş Kayabaşı, and Ekici, 2018). The fact that skills are not explicitly included in the curricula of History, Geography, and Citizenship Education implemented in Italy can be seen as a significant deficiency.

The 27 skills that are compatible with the Turkish Qualifications Framework (TQF) in the Social Studies Course Curriculum implemented in Turkey are listed as follows: Research, environmental literacy, perceiving change and continuity, digital literacy, critical thinking, empathy, financial literacy, entrepreneurship, observation, map literacy, legal literacy, communication, cooperation, recognizing stereotypes and prejudices, using evidence, decision making, location analysis, media literacy, space perception, self-control, political literacy, problem-solving, social participation, drawing and interpreting tables/graphs and diagrams, using Turkish correctly, beautifully and effectively, innovative thinking, and to perceive time and chronology. Each acquisition in the Social Studies Course Curriculum was examined and it was concluded that the acquisitions were arranged in line with these skills targeted in the curriculum. In this regard, it can be stated that the skills and acquisitions aimed to be gained in the curriculum are compatible with each other. Pala (2022) determined that the acquisitions in the curriculum were compatible with the skills targeted in the curriculum. In this regard, the results of the study conducted by Pala (2022) support the findings of this study. However, in the learning areas of the Turkey Social Studies Course Curriculum, in the section where the achievements for each grade are provided, there is a statement such as "While this learning area is taught, skills such as scientificness and sensitivity to the natural environment, as well as values such as change and innovation, should also be acquired by students." In this statement, skills and values are only given as examples with the use of "... such as" expression. Clarifying this situation in the curriculum can help social studies teachers act more clearly and jointly in raising citizens.

It was concluded that with the social studies curriculum implemented in Turkey and the History, Geography, and Citizenship Education course curricula implemented in Italy, it is desired to train citizens with higher-level thinking skills, citizens with literacy such as media literacy, map literacy, political literacy, legal literacy, citizens with skills such as research skills, participation / social participation skills, digital and technological tools and household appliances using skill, critical thinking skills, perception of time and chronology, and the ability to perceive change and continuity. At this point, it can be stated that the curricula of Turkey and Italy are similar. Scoppola (2008) concluded that it is aimed to raise citizens who have literacy such as map literacy, political literacy, legal literacy, and skills such as research skills, participation/social participation skills, change and continuity perception skills, digital and technological tools skills, critical thinking skills, and time and chronology perception skills with the curricula of History and Geography courses applied in Italy. The study conducted by Scoppola (2008) supports the findings of this study.

When examining the values that the curricula in Italy and Turkey aim to instill in citizens, it is concluded that the Turkey social studies curriculum includes more values. However, the Italian citizenship education curriculum includes acquisitions that must be addressed in all grades. In this regard, eighteen values have been reached. When the two countries are compared, it is concluded that the values of diligence, respect, responsibility, patriotism, freedom/independence, solidarity, and respect/sensitivity to cultural heritage are common in both countries. Romano (2018) stated that the Italian education system aims to raise hardworking, respectful, responsible, patriotic, free, cooperative, and respectful individuals of cultural heritage. Romano's (2018) statements support the results of this study. Santoni Rugiu (2011) concluded that the Italian education system desires to raise respectful, responsible, tolerant, and patriotic people. The conclusion of Santoni Rugiu (2011) also supports the findings of this study.

Recommendations

Based on the findings and results of the study, the following recommendations can be made:

- To improve the quality of education systems, curricula, textbooks, and education, it is considered significant to examine the current situation of other countries, especially those that are considered developed, regarding these issues. Within the scope of the study, the relevant literature was reviewed and no study was found in Turkey related to History, Geography, and Citizenship Education courses in Italy. In addition, it has been seen that there are almost no studies on other disciplines taught in Italy and even on the Italian education system. In this regard, researchers may be advised to conduct studies on the Italian education system and the curriculum of different disciplines in Italy.
- As a result of the study, it was observed that the curricula of the History, Geography, and Citizenship Education courses applied in Italy did not include a separate section of skills, and the skills that are desired to be acquired by the students are not clearly listed. It may be recommended to clearly list the skills in the curricula of the History, Geography, and Citizenship Education courses being implemented in Italy. It is considered that such an arrangement will ensure that all teachers act in the same direction.
- It was observed that the curricula of the History, Geography, and Citizenship Education courses applied in Italy did not include a separate section of values, and the values that are desired to be acquired by the students are not clearly listed. In this regard, the values that are desired to be acquired by the students can also be included in the curriculum.
- It was determined that there is no separate course in the form of Citizenship Education in Turkey, citizenship education is given in an integrated way with other courses, and the Social Studies course is a leading discipline in citizenship education. However, when the findings of the study were examined, it was determined that the knowledge, skills, and values related to

the discipline of Citizenship Education are less in the Social Studies Course Curriculum in Turkey than in the Citizenship Education Course Curriculum in Italy. In this regard, expanding the scope of Citizenship Education is recommended.

- Research can be conducted on the importance and effects of non-governmental organisations, collective activities, peer teaching in citizenship education studies to be carried out within the scope of social studies course.

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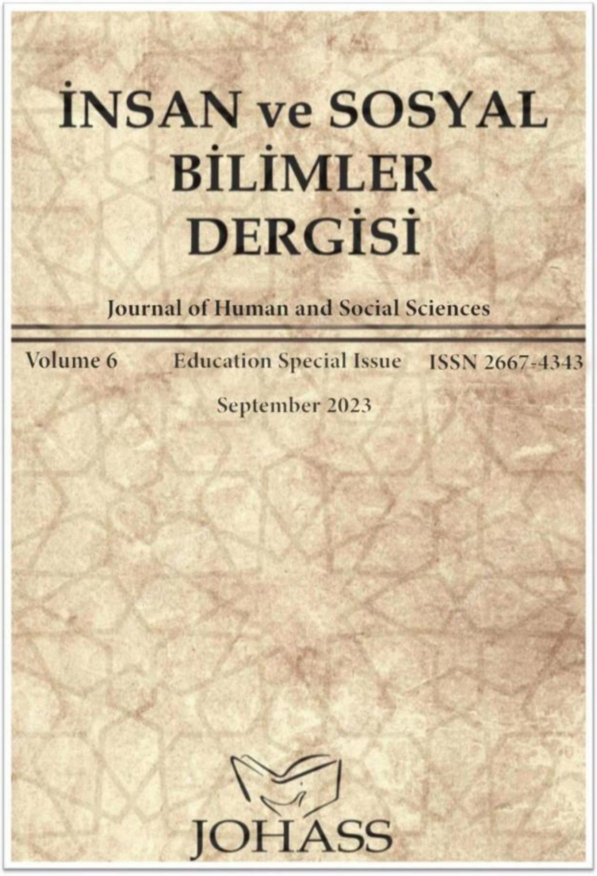

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How Can A GIS Application Develop Geographical Skills of Students: The Case Dashboards

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How Can A GIS Application Develop Geographical Skills of Students: The Case Dashboards

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Abstract **Research Article**

Geography is the user guide to the world. Thanks to geography, people should be able to perform all kinds of activities in their daily lives more efficiently and use geography in their future planning. However, for this, geographical knowledge should not be memorized; instead, it should be transformed into geographical skills. Geography teachers have a great duty in this regard. To develop geographical skills for students is a multidimensional process. Considering the expectations of today's students, one of the most appropriate tools that can be used in teaching these skills to students is dashboards, a technology based on geographic information systems. Dashboards can transform geographical information into maps, graphics, indicators, and lists thanks to their superior features, thus increasing their usability. Geography teachers' designing geography teaching processes using this technology will enable students to develop their geographical skills. However, at this point, it is seen that geography teachers are not sufficiently equipped in this regard, and examples are needed. In this study, it is aimed at explaining how dashboards can be used to teach five basic geographical skills known as asking geographical questions, collecting, organizing and analyzing geographical information, and answering geographical questions to students. In order to achieve this goal, a descriptive literature review, one of the qualitative research methods, was used. In light of the literature review, how dashboards can be used in the acquisition of five basic geographical skills is explained with examples, and suggestions on how dashboards can contribute more to the geography teaching process are given.

Keywords: Dashboard, GIS, geographic skills, geography teaching

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Introduction

In the introduction part of the study, information about the development of GIS technology, dashboards, and geographical skills is given, and why this research is needed is presented in the light of the literature review.

Development of GIS Technology and Dashboards

It can be said that the core of the science of geography is based on the relationship between the physical characteristics of the world and the various activities of people. The key element in revealing this relationship is the geographical data collected by adding spatial information to the data. By combining and analyzing geographical data, the concept of geographical information, which expresses various characteristics of geographical events or phenomena, emerges. Geographical information is obtained within the scope of four basic principles. These principles can be listed as the principles of distribution, relationship, comparison, and causality (Özçağlar, 2003). The full implementation of these principles is only possible through spatial analysis. Therefore, it can be said that spatial analysis based on geographical information is the most significant subject of geography.

There is a technology that enables spatial analysis, which is the basis of the science of geography, to be done more comprehensively and in a short time. his technology is called Geographic Information Systems (GIS). GIS is the general name given to decision support systems consisting of components such as hardware, software, data, personnel and methods, which are used to solve economic, social, environmental, etc. problems experienced worldwide by performing the collection, storage, analysis, processing, management, querying and presentation of geographical data to users (Ministry of Environment, Urbanization and Climate Change, 2023).

Thanks to GIS, "geographic information" collected in line with the basic principles of geography is analyzed within a "system" within the framework of a workflow model based on information technologies. This analysis can be done easily thanks to the ability of GIS to work with layers. For example, temperature, precipitation, elevation and vegetation characteristics of a study area can be displayed on the same map with different layers and the relationship between these layers can be examined (Yomralıoğlu, 2005). Spatial analysis results obtained with GIS are visualized and presented with maps, graphics, etc. The most significant feature that distinguishes GIS from other computer systems is this visualization dimension (Turoğlu, 2000).

GIS technology, which has entered our lives with the development in technology, gains different features by being affected by technological developments. Although the use of GIS dates back to the 1800s, the widespread adoption of computer-assisted GIS extends from the 1960s to the present day. During this period, innovations such as remote sensing and global positioning (GPS) systems have increased the usability and efficiency of GIS. With these superior features, GIS is used in numerous of different fields ranging from transportation planning to environmental impact analysis, from the management of natural resources to the management and prevention of disasters (Kara, 2016).

As the use of the Internet has become accessible to more and more people around the world, GIS technology has changed its dimension and the concept called WEB GIS has emerged. In its simplest definition, WEB GIS is a GIS that uses WEB technology to communicate between a server and a client. In this definition, the server is cloud storage systems and the client is usually a web browser or an application on a mobile device. The most important advantage of WEB GIS for users is that it eliminates the need for hardware with high system requirements and provides a much easier and more practical use, especially thanks to its ability to work on mobile devices. Some of the advantages of WEB GIS are that the GIS products created can be easily delivered to millions of users around the world with internet access, can easily adapted to different operating systems or web browsers, and they are more accessible in terms of cost compared to classical desktop GIS applications, and have an interface that can be easily used even by people who do not have a very high level of computer literacy (ESRI, 2023a). One of the tools offered for use within the scope of WEB GIS applications is "Dashboards", a product of ESRI company. Dashboards allow users to present their location-based analyses on a single screen with simple and interactive data visualizations. In addition, with dashboards, the status of any geographical event or phenomenon can be monitored in real time, and the trends of this event or phenomenon can be visualized with graphics and various indicators (ESRI, 2023b). During the COVID-19 pandemic that began in 2019, the Dashboard created by John Hopkins University to monitor the course of the pandemic was followed with interest by the whole world (Figure 1).

Figure 1

A Dashboard With Real-Time Data Flow Prepared by John Hopkins University to Monitor The Pandemic (John Hopkins University&Medicine, 2023).

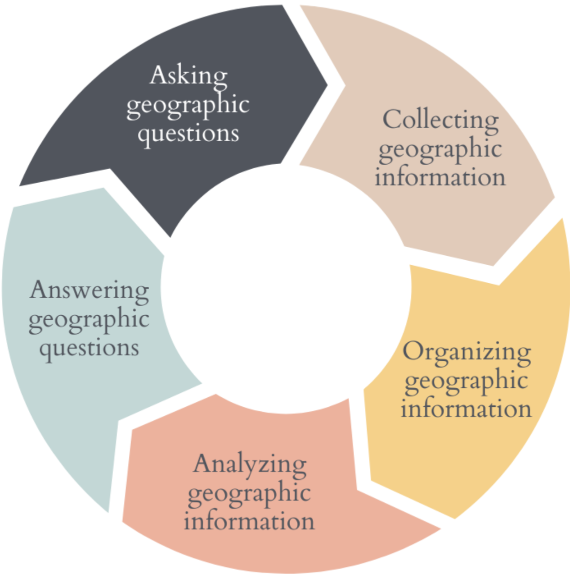
Using GIS to Develop Geographical Skills

Geography examines the characteristics of landforms, the distribution of population, economic activities such as agriculture and industry, natural disasters and much more. Therefore, these subjects are taught in geography courses all over the world. However, it is also essential to focus on issues such as how the information related to these subjects can be used outside the teaching process, that is, how it affects people's daily lives and how it can be used in future planning (Artvinli, 2012). Nonetheless, geographical knowledge is often perceived only as correctly showing the location of countries on a map or knowing the capitals of these countries (Kubiatko et al., 2012).

If any information cannot be used in daily life, its function cannot be more than a burden in our minds. This principle holds true for geographical knowledge as well. Geographical knowledge gains meaning when it is transformed into skills and integrated into daily life. It is precisely at this point that geographical skills should come to the agenda. When the geography curricula of the developed countries in the world are examined, it is observed that geographical skills are included in addition to the classical achievement statements. With these skills aimed to be acquired, students are expected to understand the characteristics and potential of the space they live in and thus to construct the spaces in a way that will provide maximum benefit (Çiftçi & Yücel, 2022). Although there are skills with different names in the geography curriculum of each country, it is seen that they are derived from the five fundamental skills in the Lifelong Geography document made in 1994. These skills are given in Figure 2:

Figure 2

Five Basic Geographical Skills (Geography Education Standarts Project [GESP], 1994).



In studies investigating students' views on geography lessons, it has been concluded that they mostly think that geography lessons consist of memorization and find geography lessons boring (Aydın, 2012; Dikmenli & Çiftçi, 2016). In many studies on this subject, it is stated that the biggest problem seen in the teaching of geography course is that the geography course is designed as a teaching process in which students are made to memorize (Akyol, 1999; Sekin & Ünlü, 2002; Şahin, 2003; Ilgar, 2006; Gökçe, 2009). Sözcü, Türker and Dündar (2023) concluded in their research on high school students that geographical information is not used much in daily life. Geographical knowledge and skills are acquired by students through geography teaching. The sources of geography teaching are elements such as teachers, curriculum, textbooks or teaching materials. Therefore, the reasons for the transformation of geographical knowledge into geographical skills should be sought in these sources.

Although the age we are in is expressed in different ways in different sources, it can be said to be an age of technology in general. Because in this age, technological developments are faster than ever before. One of the areas affected by these developments is education. In order to educate students who are born directly into technology (Prensky, 2001), there seems to be no other way out than integrating technology into education. Technology integration into education is a complex process with many dimensions (Kabakçı Yurdakul & Odabaşı, 2013). In order to carry out this complex process successfully, teacher competencies should be increased with a focus on technology, and the education system, curricula, textbooks, teaching materials and other elements should be designed in accordance with technology integration. When the literature is reviewed, it is seen that one of the things to be done to ensure successful technology integration is to provide teachers with the necessary support for technology integration. This support can be provided in the form of in-service trainings, professional study groups or sample lesson designs in which technology is integrated. However, the result of the literature review is that this support cannot be given too much for geography teachers to successfully integrate technology into their lessons (Allan et al., 2010; Jang, 2010; Açıkgül, 2017). According to Kerski (2021), in order to develop GIS usage skills in teachers, instead of buttons, menus or interfaces, the focus should be on how to use which parts of the user interfaces to develop students' problem-solving, critical thinking and spatial thinking skills.

When the words geography and technology come together, the first technology that comes to mind is Geographic Information Systems (GIS) technology. GIS has many sub-applications within itself. One of them is the panels called "Dashboard". Thanks to GIS-based dashboards, geography lessons can be transformed into geographical skills by transforming geographical knowledge into geographical skills. Geography teachers want to integrate GIS into their lessons, but they do not know how to do this because they have not received adequate training on this subject at university (Babacan, 2015). Geography teachers need to know how to do this and should have pre-service or in-service training (Artvinli, 2009).

The aim of this study is to demonstrate with examples how dashboards can be used to teach geographical skills to students. Thus, it is aimed at guiding geography teachers on the use of dashboards in teaching geography skills to students and to contribute to closing the gap in the literature on this subject. In this context, answers to the following sub-problems were also sought:

- How can dashboards be used in developing the skill to ask geographical questions?
- How can dashboards be used to improve the skill to collect geographic information?
- How can dashboards be used to improve the skill to organize geographic information?
- How can dashboards be used to develop the skill to analyze geographic information?
- How can dashboards be used to develop the skill to answer geographical questions?

Method

In this study, which aims to reveal how GIS technology-based dashboards can be used to teach geographical skills to students, a descriptive literature review from qualitative research methods was used. Qualitative research collects data through methods such as observation, interview or document analysis and summarizes them in various ways (Creswell, 2012). In this study, document analysis was used to make explanations about how geographical skills can be developed with GIS-based dashboards. Document analysis is the analysis of written materials containing the information that needs to be accessed to achieve the purpose of the research (Yıldırım & Şimşek, 2018). In this context, various sources on the use of dashboards in geography teaching processes were examined. In addition, under the coordination of the researcher, the data of an in-service training aimed at increasing the use of GIS by geography teachers in Turkiye were utilized.

Following the document analysis, the collected data were analyzed using a descriptive analysis method. In descriptive analysis, the data collected are organized in line with the research objectives and presented to the reader (Yıldırım & Şimşek, 2018). In this study, the data collected were organized and interpreted according to the five fundamental geographical skills and the results were revealed.

Findings

In this section, in light of the literature review, explanations on how to use dashboards in teaching five basic geographical skills to students are given.

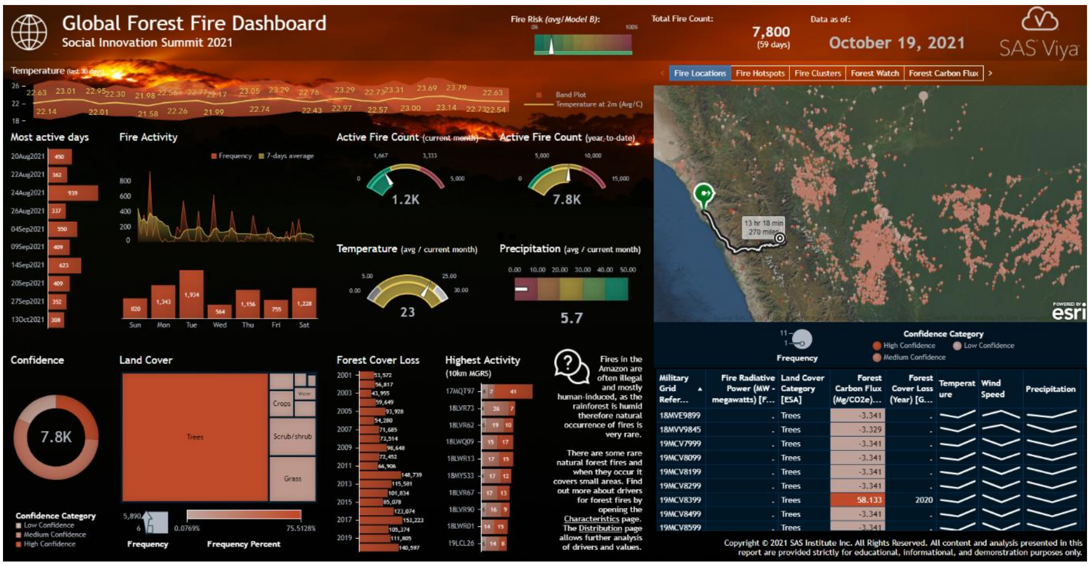
Using Dashboard to Develop the Skill of Asking Geographical Questions

The first step in conducting research on any geographical topic should be to ask questions. Because at the end of the mental process that starts after the question is asked, possible answers emerge and a hypothesis is formed. The need to verify hypotheses by spatial analysis also determines the road map of geographical study. The basic questions that can be asked in a spatial analysis study without the use of dashboards have basic and one-dimensional features such as "What, where, how much?"; Thanks to the ability of dashboards to process many different data layers and make analysis and visualization, geographical questions become more comprehensive and multidimensional such as "What is it related to, what is the cause, what are the effects?". For example, the use of traditional teaching methods in a geography teaching process in which the subject of natural disasters is covered without the inclusion of any technology in the process will cause the inability to develop the skill to ask geographical questions about the subject. The geographical questions that students can ask in this teaching process will be non-multidimensional questions such as "What is a natural disaster?", "Where are natural disasters seen in the world?" or "How many people have lost their lives as a result of natural disasters?". With the inclusion of dashboards in the geography teaching process, the level of geographical questions can also increase.

After creating a basic map where the locations of natural disasters are added as point data, layers containing different data can be added to this map. For example, a layer of temperature distributions can be added to the map of a dashboard application related to forest fires, and graphs can be produced that reveal the relationship between forest fires and temperature distribution. This can lead to the question "Where in the world are forest fires most common?" and "What is the relationship between forest fires and temperature distribution?". Dashboard's ability to produce a graph that can reveal the distribution of data containing time information from past to present can enable a high-level geographical question such as "How has the frequency of forest fires changed from past to present?". Starting the geography teaching process with questions that mobilize high-level thinking skills such as this will contribute to the development of the remaining four basic skills.

Figure 3

A Dashboard on Forest Fires (SAS, 2022).

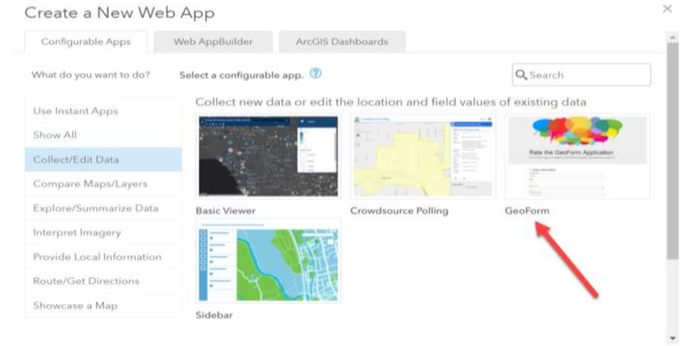


Using Dashboard to Develop the Skills of Collection Geographical Information

The prerequisite skill for students' to ask geographical questions is collection of geographical information. Geographical knowledge emerges as a result of processing and analyzing various data belonging to a place or a person. For example, the expression "945 mm precipitation" is a data. However, the statement "Antalya's average annual rainfall is 945 mm" is geographical information. What gives the information given in this statement a geographical quality is that it contains location information (Koç, 1993; Gürleyen, 2016). Dashboards transform raw data into geographic information by adding location information and visualizing them with various indicators. Therefore, dashboards have a driving force that mobilizes students to develop the skill to collect geographical information. In order to develop geographical skills, it is necessary to have geographical knowledge (Türker & Sözcü, 2021). Geographic information can be obtained from two different sources. The first one, primary sources, are the questionnaires, videos and photographs taken by students during fieldwork, or the notes taken from their observations (Bednarz & Bednarz, 1995). Geographical skills cannot be taught only inside of the classrooms. Many times, it is needed to go to field work and observation on the nature (Dönmez & Artvinli, 2021). Different applications that can be used while creating maps in dashboards enable geographic information collected from primary sources to be easily added to maps. One of these applications is the "GeoForm" application (Figure 4). Thanks to GeoForms, geographic information with the desired spatial or temporal dimension can be easily collected from the field. Students who go to the field with mobile devices supported by GPS technology can transfer the information requested from them to the map through these applications in cooperation with themselves, thus improving their geographical information collection skills.

Figure 4

Maps to be Added to Dashboards can Collect Data From the Field With A Web Application Called Geoform (Created Specifically for This Article).



Using Dashboard to Develop the Skill of Organizing Geographical Information

Data collected from primary or secondary sources should be organized in a meaningful way after the process of transforming them into geographical information with GIS applications. Dashboards support the development of this skill in students with their features. For this purpose, column or pie charts, various indicators, lists, tables, enriched texts or embedded web objects can be added to the dashboard according to the nature of the data in the attribute table of the map (Figure 5) and can be designed according to the dashboard layout (Figure 6).

Figure 5

Dashboards can Include Many Different Elements for Organizing Geographic Information (Created Specifically for This Article).

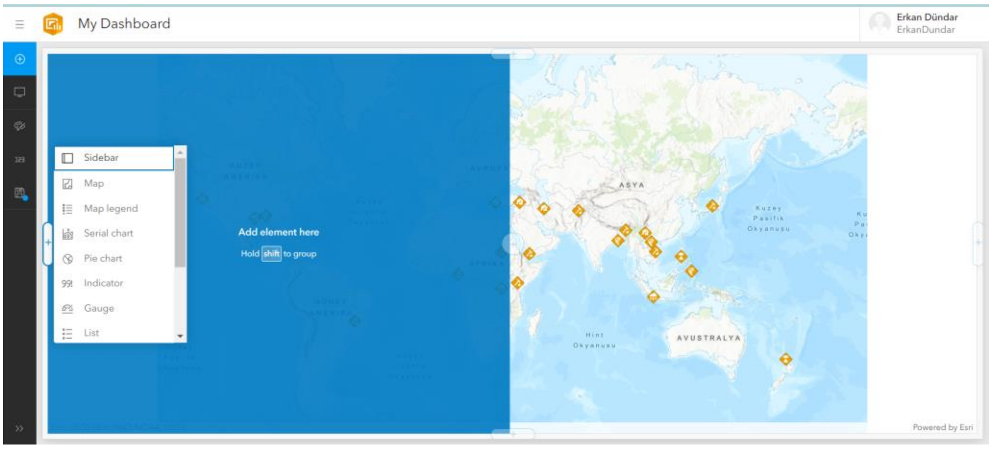
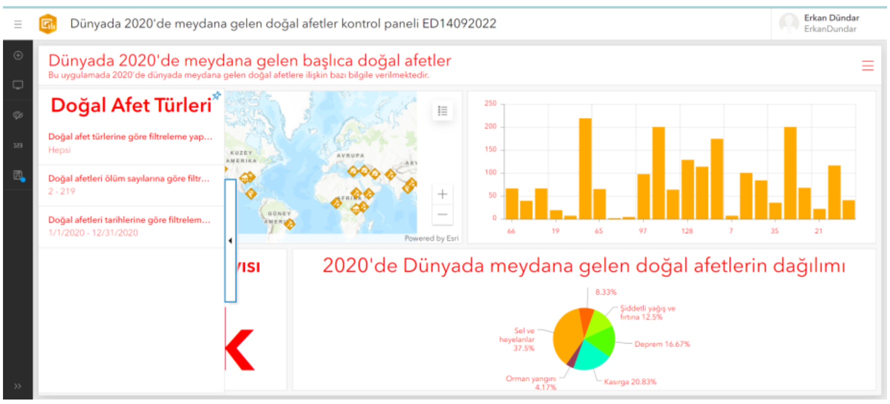


Figure 6

Elements Added to Dashboards can be Moved to Different Places and the Layout can be Easily Changed. (Created Specifically for This Article).



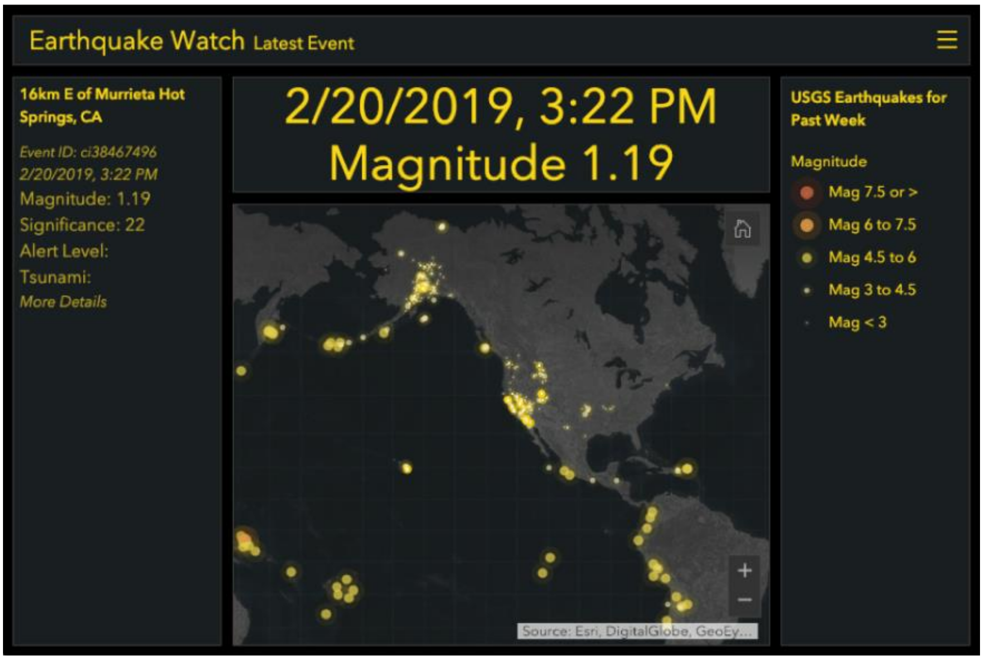
In the dashboard shown in Figure 6, the data collected by the students from secondary sources about the main natural disasters that occurred in the world in 2020 were transferred to the map with the Geoform application by adding metadata such as location information, description, numbers, date, and using this attribute information on the map, a pie and column chart, indicator and filter list element were added. Thus, the geographical information obtained by the students was organized in an orderly manner and made meaningful through the dashboard.

Using Dashboard to Develop the Skill of Analyzing Geographical Information

The skill to analyze geographical information, which can be defined as recognizing patterns and relationships between organized geographical information (Taş, 2008), can be easily developed by students thanks to visual elements such as map-based graphics, tables and indicators provided by dashboards. Dashboards facilitate the analysis of geographical information by increasing its comprehensibility with the visualization it enables. Another important feature of dashboards that should be emphasized in analyzing geographical information is the ability to monitor real-time data. In this way, it is possible to instantly analyze geographical information that may change especially in a short time. With this feature, every data added to the map by different users is instantly reflected in the visual elements of the dashboards and new patterns and relationships can be analyzed up to date. In this way, dashboards can be used effectively in solving real-world problems thanks to their live data flow feature (Milson & Kerski, 2012). For example, thanks to a dashboard created for instant monitoring of earthquakes (Figure 7), activities such as intervention and search and rescue can be organized quickly. Or, in the geography teaching process, students can analyze the most up-to-date geographical information by updating a dashboard where they can reveal the age and gender distribution of the population in their neighborhood according to the changes that may occur in the population. Different results are reached as a result of analyzing geographical information (Taş, 2008). The use of dashboards will attract students' attention in reaching these different results by analyzing geographical information. For example; the maps that students create on a dashboard about the population of the neighborhood where they live or the visual elements they add to the dashboard will enable them to analyze the spatial distribution and patterns of the population. In addition, the graphs they will create from the data they obtain will enable them to analyze the trend of the population and the relationships between the elements with which it interacts, the numerical data to be added will enable them to analyze the ranking of the population in space according to different dimensions, and the integration of written geographical information and other elements will enable them to reveal the rationale and result of their analysis.

Figure 7

A Dashboard Application Tracking Recent Earthquakes (Nyenhuis, 2022).



Using Dashboard to Develop the Skill of Answering Geographical Questions

The skill of answer geographical questions is the skill to answer the geographical question asked at the very beginning of the process as a result of the spatial analysis. Students will be able to make inferences to be obtained from geographical information organized with elements such as graphics, maps and indicators offered by dashboards more easily, so they will be able to answer geographical questions easily.

As emphasized before, dashboards ensure that the geographical question to be asked is at a higher level and naturally the answer is also at a higher level. For example, the use of dashboards in a geography teaching process related to the classification of settlements according to the amount of population will enable the creation of different categories by analyzing the attributes consisting of the data collected about the population, and visualizing each of these categories with different dashboard elements will provide not only an answer to the question "What are the settlements according to the amount of population?" but also the answers to the questions "Where are the settlements concentrated according to their population?", "What are the geographical factors that affect the population amounts of these settlements?". In addition, dashboards created in the process starting with any geographical question can be added to a storyboard. Thus, geographical questions can be answered more clearly with a storyboard consisting of different slides that emphasize the desired elements of the dashboard and are enriched with extra explanations. Although answering geographical questions is normally the last step of geographical research, answering geographical questions in a learning environment where dashboards are included in the process leads to the emergence of different geographical questions, thus returning back to the beginning of the cycle. This, in turn, restarts the cycle, ensuring that geographical research is an ongoing and continuous process.

Discussion and Results

Until the recent past, geography education primarily involved conveying shallow information to students such as how certain landforms are formed, showing where countries are located on the map or knowing what their capitals are. However, in recent years, countries have started to include geographical skills that will enable students to use this knowledge in solving real life problems in their daily lives, in addition to the geographical knowledge expressed by the topics in the geography curriculum. Thus, it is aimed to transform geography course from being a boring course in which only theoretical knowledge is conveyed to students and to transform geographical knowledge into useful skills. For this purpose, it is a common point emphasized in various studies that the resources of geography teaching should be focused on teachers, curriculum, textbooks and teaching materials. In the age in which technology has become the focal point of our lives, the use of these technologies in teaching geographical skills to students has become a necessity rather than a choice. For this reason, GIS applications in secondary school geography lessons should be designed at the level of learn with GIS and research with GIS (Artvinli, 2010). When the words geography and technology are considered together, the first technology that comes to mind is GIS. GIS takes its source from the science of geography and includes the use of technology that can increase students' interest in geography lessons (Alibrandi, 2003; Beishuizen, 2006; Donert, 2006; Kerski, 2000; Taştan, 2021). GIS includes many sub-applications in connection with its structure and usage areas. One of them is WEB GIS-based "Dashboards", which is an application that both transforms geographical data into geographical information and organizes geographical information with visual elements such as various graphics, indicators and lists to provide students with geographical skills. Dashboards can be used to help students acquire the five basic geographical skills identified by Geography for life, which are the starting point for other geographical skills. These skills can also be considered as a stage of the geography course teaching process. In this process, thanks to the ability of dashboards to visualize geographical information with different elements, students can ask higher-level geographical questions; with auxiliary applications that can provide data to dashboards, very different data from primary or secondary sources can be transformed into geographical information by adding them to maps, this information can be organized in a single dashboard to answer the high-level geographical questions asked, especially thanks to the live data flow feature, data analysis that is always up-to-date can be done, and high-level geographical questions asked at the very beginning of the process can be answered clearly thanks to supporting applications such as story maps. These contributions of dashboards to the geography teaching process will enable the student to have basic geographical skills by staying in an active position continuously, and thus to use these skills acquired from the geography course effectively in solving real-life problems in daily life. In this way, the geography course will cease to be a boring course that needs to be memorized and will become one of the most important components of education in developed countries. It is seen that these results obtained from the research overlap with the results of many researchers that as a result of integrating GIS, especially WEB GIS, into geography teaching processes, students' academic achievement, interest and attitudes towards geography course increase (Çukur, 2005; Özgen & Çakıcıoğlu, 2009; Aydoğmuş 2010; Ünal, 2012; Kaya & Kaya, 2013; Taştan, 2021).

Based on the results of this study, it can be said that WEB GIS-based dashboard technology is one of the important technologies that can be used in teaching geographical skills to students.

Recommendations

Within the scope of this research, suggestions for integrating dashboards into the geography teaching process and using them to develop geographical skills are as follows:

- Dashboard technology should be integrated into the objectives and skills in the geography curriculum through exemplary lesson designs.

- In-service training should be provided for geography teachers about dashboards and their capabilities. These in-service trainings should address how to create sample course designs in which dashboard technology is integrated.
- In the geography teaching process, guidebooks on the use of dashboards, especially in achievements related to maps and graphics, should be prepared and delivered to geography teachers.
- Technical support should be provided to solve the problems that may be encountered in the use of dashboards in the geography teaching process. Collaboration should be made with GIS service providers in the formation of this technical support team.
- Online professional working groups should be established so that geography teachers who receive in-service training can share good examples of dashboard use among themselves. Academicians who have studied GIS should also be included in these groups, and university and field cooperation should be ensured.
- Studies should be conducted to investigate the effects of dashboards on students' academic achievement in geography courses and their attitudes towards geography courses.

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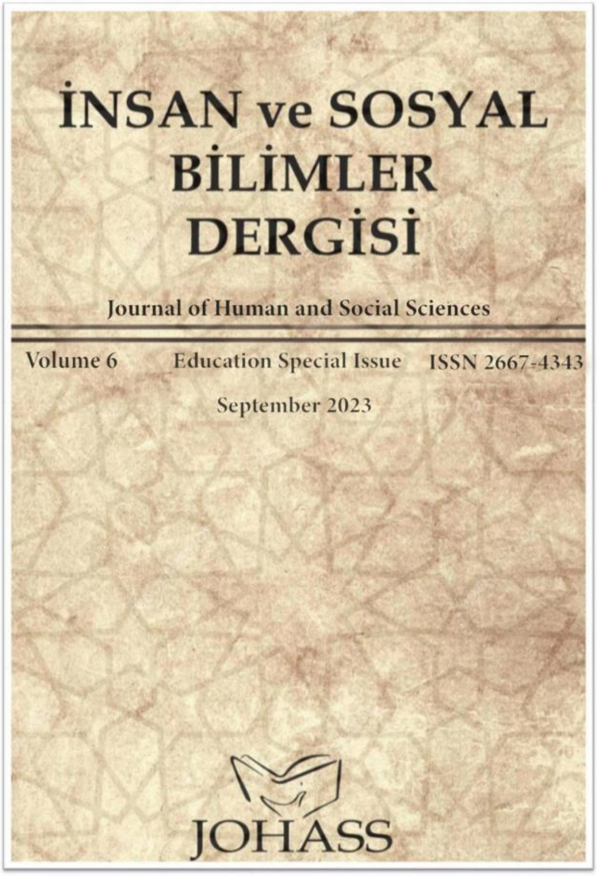

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Self-Leadership Levels of Pre-Service Social Studies Teachers

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Self-Leadership Levels of Pre-Service Social Studies Teachers

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Abstract **Research Article**

The aim of this study is to determine the level of self-leadership behaviors of pre-service social studies teachers. In this direction, it was tried to determine the self-leadership levels of the students in Çanakkale Onsekiz Mart University, Faculty of Education, Department of Social Studies Education, by applying a questionnaire, which is one of the quantitative methods. In this study where the survey model was used. The survey application planned to be made on 200 students was completed with 165 students. The findings obtained as a result of the research completed with a participation rate of 82.5 %, it has been revealed that the sub-dimension of imagining successful performance by setting goals only for oneself has a positive and significant relationship with other dimensions. It is seen in the conclusion section self-talk ($r=0.66$; $p<0.05$), evaluating thoughts and ideas ($r=0.62$; $p<0.05$), self-observation ($r=0.75$; $p<0.05$), setting reminders ($r=0.45$; $p<0.05$), self-punishment ($r=0.73$; $p<0.05$), self-rewarding ($r=0.57$; $p<0.05$), and focusing thoughts with natural rewards ($r=0.47$; $p<0.05$). Due to results there is a positive relationship between theese indicators. With this study, it has been shown that there is a need to increase the number of studies that will improve pre-service teachers' self-leadership levels.

Keywords: Self-leadership, social studies, pre-service teachers

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Introduction

The word "Lider" comes into our language from the English word "leader", which in English means "leading", "guiding" and "pioneering". Leadership is considered as a process and a leader is defined as a person who is involved in and manages this process. Since the beginning of history, leaders have been in a different position from other people and have been characterized as "powerful" with different sources. Power as a source has been attributed to the person who is referred to as a leader, sometimes physically, sometimes spiritually, and sometimes both physically and spiritually.

Leadership, as a management style, has been the subject of research at different times and in different geographies since it entered the scientific literature. In the early days of the research, Classical Leadership Approaches, especially Trait Theory, talked about a single type of leadership, while in the recent era, Modern Leadership theories have made new contributions to the literature in the focus of leader and follower. While the classical leadership approach is categorized as Trait Theory, Behavioral Theory and Situational Theory, there are many leadership approaches such as transformative leadership, visionary leadership, ethical leadership, paternalistic leadership and self-leadership in modern leadership theories. One of the modern leadership approaches, self-leadership, is shaped by the belief that, unlike other leadership approaches, one should lead oneself first.

Northouse (2014) mentions that leadership is a process and influence business. The first studies about leadership in the management literature started with the Big Man Theory in the first half of the 1900s. After the Big Man Theory, the characteristics approach gained weight in the 1940s. Especially in the 1930s and 1940s, a lot of research has been conducted on what characteristics successful leaders have. In these studies, it was emphasized that some people are born as natural leaders and differ from others in terms of their characteristics (Koçel, 2018).

The concept of self-leadership has been explained as "a process in which individuals control, influence and direct their own behavior by using specific behavioral and cognitive strategies" (Cristofaro & Giardino, 2020). Self-leadership is the process of one person influencing a group of people to achieve a common goal (Northouse, 2014). While in other types of leadership, the leader acts on his/her followers, in self-leadership, the individual acts on and inspires himself/herself (Maykrantz & Houghton, 2020: 89). Leadership theorists argue that individuals can direct their own behavior by setting their own standards, that is, they can self-manage and appreciate their own performance based on self-assessment (Abid vd. 2020: 300).

Stating that it is now known that personality traits affect self-management, Williams (1997) argues that intrinsically motivated self-leadership is closely related to personality. The theoretical basis of the concept of self-leadership is based on social learning theory and social cognition theory (Manz, Sims Jr., 1980). Social learning theory assumes that people learn through observation and cognition; it tries to explain how individuals can influence their cognition, motivation and behavior. On the other hand, social cognition theory is based on the assumption that human beings are in constant interaction with their environment and that the consequences of behavior are the source of knowledge and motivation (Norris, 2008).

Model Leadership and Self-Efficacy

Leadership is a phenomenon as old as human history, not only in western societies but also in eastern societies. Buddha, Confucius and the Indian king Asoke were leaders as impressive as Plato and Aristotle. Myths and legends built around leaders have played an important role in the formation of modern societies (Bass, 1990). As long as the world exists, the concept of leadership will emerge as a great power. The use of this power to influence individuals and societies is a weapon that will never grow old.

The phenomenon of management has become an important topic, especially with the scientific approach of the 20th century. Until recently, management has been on the agenda with its impact on societies, but more recently, self-leadership (self-leadership) has become a characteristic that must be achieved before the management of society. The concept of self-leadership was introduced to the literature by Manz in 1983. According to Cristofaro and Giardino (2020), self-leadership is a process in which individuals control, influence, and manage their own behavior through specified attitudinal and cognitive strategies. Manz (1986), on the other hand, defines self-leadership as a process based on leadership and motivation that individuals need while performing their tasks and jobs.

Self-Efficacy (Effectiveness) Theory was first proposed by the famous psychologist Albert Bandura in 1977 within the scope of "Cognitive Behavior Change". The Self-Efficacy Theory, which Bandura introduced to the literature, failed to garner sufficient attention by scientists in its time and was generally understood as an approach that could be used to define talking to oneself. Bandura defined self-efficacy as an individual's judgments about his/her ability to successfully manage the work assigned to him/her (Feltz, et al., 2008). This approach was defined as an expansion of the Self Management Theory defined by Manz and Sims (1980) in 1980 (Manz, 1986).

Self-efficacy belief is a cognitive process in which an individual influences and directs himself/herself by representing an objective perception of what he/she has and not what he/she is (Morris & Summeres, 1995; Neck & Houghton, 2006). Self-efficacy beliefs affect individuals' judgments about their abilities, their thoughts and emotional reactions, especially when they are in relationship with their environment. Individuals with a sense of inadequacy show inertia and magnify potential difficulties more than they are, while individuals with a strong sense of efficacy are able to focus their attention and take action according to the requirements of the circumstances (Schwarzer & Fuchs, 2005). The higher an individual's perception of self-efficacy, the greater his/her ability to withstand and overcome the difficulties he/she faces. Self-efficacy perception also affects the level of stress and anxiety that individuals experience individually while engaging in an action (Pajares & Schunk, 2001). Individuals with self-efficacy are also expected to have high self-confidence. Individuals with high self-confidence will inevitably be successful in the actions they undertake. Rosenberg (1965) states that individuals with high self-confidence can express themselves correctly, exhibit patient behavior, have high social skills, and have more prominent leadership qualities. (Song & Lee, 2016).

It is possible to see personalities with the leadership qualities mentioned above in Turkish history. For example, Bilge Kagan, Ertuğrul Gazi, Fatih Sultan Mehmet, Yavuz Sultan Selim, Mustafa Kemal Atatürk are leaders who left their mark on Turkish history. When the lives of these leaders are examined, it can be easily seen that they have the leadership qualities mentioned in the literature.

The Concept of Self Leadership

New leadership approaches emphasize the necessity for leaders to have a vision and the ability to adapt to change (Clegg et al., 1999). The difference between self-leadership and other leadership approaches is that the individual who is attributed as a leader is primarily effective on himself/herself rather than on his/her followers and inspires himself/herself (Maykrantz & Houghton, 2020). Self-leadership has deep roots in many related theories. These theories include Self-Regulation Theory (Kanfer, 1970; Carver & Scheier, 1981), Self-control Theory (Cautela, 1969; Mahoney & Arnkoff, 1978, 1979; Thoresen & Mahoney, 1974), Self-Management Theory (Andrasik & Heimberg, 1982; Luthans & Davis, 1979;

Manz & Sims, 1980), Internal Motivation Theory (Deci & Ryan, 1987), Social Cognition Theory (Bandura, 1977) and Clinical Cognitive Psychology (Beck et al., 1979; Burns, 1980; Ellis, 1977) theories. On this theoretical basis, self-leadership has a set of behaviors and cognitive strategies that positively affect individual performance outcomes (Houghton & Yoho, 2005).

Self-leadership is a broader type of leadership that includes the processes of self-regulation, self-influence and self-management and is identified with the self-motivation of the individual (Manz, 1986). Self-leadership is a prescriptive approach to behavior, motivation, and cognitive strategies that leads to an increase in an individual's performance (Neck & Houghton, 2006). In the light of the definitions of self-leadership, it is understood that individuals with self-efficacy can self-lead. Individuals who know themselves and know when, where and how to behave accept their own leadership and can lead themselves well. In this context, the prerequisite for an individual to lead other individuals and societies is to be able to lead himself/herself.

Self-leadership encompasses behavioral and consciousness-oriented strategies that are shaped to positively influence individual effectiveness. Scholars refer to three different dimensions of self-leadership that can create changes in an individual's behavior (Prussia et al., 1997; Houghton & Neck, 2002; Neck & Houghton, 2006).

Behavior-Focused Strategies: It is related to the individual's ability to direct the behaviors that he/she exhibits and/or will exhibit with self-discipline. Which behavior will be more appropriate in the face of events and situations is evaluated within the scope of this strategy. The focus of control is on behavioral outcomes.

Natural Reward Strategies: This type of strategy is the motivational component of self-leadership in which the task is satisfied in a natural way. Natural rewards aim to increase the intrinsic motivation of the individual while performing the task (Manz & Neck, 2004). Natural reward strategies are the work of creating situations in which the individual is naturally motivated or rewarded by the work and actions performed (Manz & Neck, 2004; Manz & Sims, 2001).

Constructive Thought Pattern Strategies: This model represents the cognitive dimension of self-leadership.

According to Burns (1980), Ellis (1977), Manz and Neck (2004), and Neck and Manz (1992), these strategies include identifying and eliminating dysfunctional beliefs and predictions, daydreaming, and positive self-talk, and the individual should first pay attention to his/her thought patterns and replace dysfunctional beliefs and predictions with more constructive thought processes.

Teachers are expected to have leadership qualities. Teachers with leadership qualities can create a more effective learning environment and provide more effective guidance. In connection with this, the problem situation that the research wants to draw attention to is to reveal how pre-service teachers' self-leadership perceptions are. In this context, the research questions can be expressed as follows;

1. At what level do pre-service social studies teachers exhibit self-leadership behaviors?
2. Do grade level and gender have an effect on pre-service social studies teachers' self-leadership behaviors?
3. Do self-leadership behaviors have a relationship with each other in sub-dimensions?

Method

Model

This research was conducted on the students of Social Studies Teacher Education at Çanakkale Onsekiz Mart University, Faculty of Education. In this study, which was conducted on 165 students, a questionnaire application was used as one of the quantitative research methods. In this study where the survey model was used. The survey model is all of the processes applied to describe a situation in the past or present as it exists, for the realization of learning and the development of desired behaviors in individuals. In the general survey model, in a universe consisting of a large number of elements, a survey is conducted on the whole universe or a group of samples or samples to be taken from it in order to make a general judgment about the universe (Karasar, 2011).

Data Collection Instruments

In this study, the Turkish form of the Self-Leadership Scale developed by Houghton and Neck (2002) and adapted into Turkish by Tabak et al. (2013), consisting of 29 items, was used. The findings obtained as a result of the study conducted by Tabak et al. (2013) show that the Turkish Form of the Self-Leadership Scale consisting of 29 items and 3 dimensions is a reliable and valid scale. Although the scale has 3 basic dimensions as behavior-oriented, natural reward, constructive thinking strategies and 8 sub-dimensions listed under these dimensions, the research was concluded by taking into account the sub-dimensions.

Analysis of Data

Firstly, the gender and grade levels of the students were determined and analyzed descriptively. The Self-Leadership Scale was used to measure the self-leadership perceptions of social studies students. According to the demographic characteristics of Social Studies students, the dimensions of self-leadership behaviors with their sub-dimensions were measured by ANOVA and the meaning relationship between the dimensions was measured by Pearson Correlation tests.

Compliance with Ethical Standard

The questionnaire study, planned to be applied on pre-service teachers, was ethically approved by the decision of Çanakkale Onsekiz Mart University School of Graduate Studies Scientific Research Ethics Committee dated 30.03.2023 and numbered 04/72.

Findings

Participant Group

Table 1 shows the distribution of the pre-service social studies teachers who participated in the study according to their descriptive characteristics.

Table 1

Distribution of Participants According to Their Descriptive Characteristics

Descriptive Characteristics	Groups	n	%
Gender	Woman	118	71,5
	Male	47	28,5
Class level	1st grade	40	24,2
	2nd grade	45	27,3
	3rd grade	50	30,3
	4th grade	30	18,2

Of the 165 pre-service social studies teachers who participated in the study, 71.5% were female and 28.5% were male. Of the participants, 24.2% were in the first grade, 27.3% in the second grade, 30.3% in the third grade, and 18.2% in the fourth grade.

Descriptive Findings

Table 2 shows the descriptive statistics of self-leadership scale scores.

Table 2

Descriptive Statistics of Scale Scores

Size	N	Min.	Max.	XX	SS	Skewness	kurtosis
Imagining Successful Performance by Setting Goals for Yourself	165	2,00	5,00	3,93	0,60	-0,48	0,19
Self-Talk	165	2,33	5,00	3,92	0,64	-0,58	-0,23
Evaluating Thoughts and Ideas	165	2,00	5,00	4,00	0,61	-0,63	0,41
Self Observation	165	2,00	5,00	3,95	0,59	-0,67	0,92
Setting Reminders	165	2,00	5,00	4,05	0,70	-0,50	0,07
Self Punishment	165	2,00	5,00	3,97	0,55	-0,59	0,58
Self-Rewarding	165	2,33	5,00	4,04	0,68	-0,54	-0,37
Focusing Thought with Natural Rewards	165	2,00	5,00	4,07	0,67	-0,56	0,59
SELF LEADERSHIP	165	2,11	4,93	3,97	0,50	-0,38	0,74

The self-leadership behaviors scale score was found to be 3.97±0.50, and according to the lowest (1) and highest (5) scores that can be obtained from the scale, it was determined that the self- leadership behaviors of the pre-service social studies teachers participating in the study were in the "usually" range. The highest self-leadership behaviors were found to be focusing thoughts with natural rewards (4,07±0,67), setting reminders (4,05±0,70), and self-rewarding (4,04±0,68). Based on the skewness (between -.67 & -.38) and kurtosis (between -.37 & .92) values normality assumption was met.

Comparison of Self-Leadership Behavior Scores According to Demographic Variables

Table 3 shows the results of the independent two sample t-test for the comparison of self- leadership behaviors scores according to gender.

Table 3

Comparison of Self-Leadership Behaviors Scores According to Gender

Size	**Gender**	**n**	**$\bar{X}$**	**SS**	**t**	**p**
Imagining Successful Performance by Setting Goals for Yourself	Woman	118	3,94	0,56	0,62	0,538
	Male	47	3,88	0,67		
Self-Talk	Woman	118	3,93	0,66	0,39	0,700
	Male	47	3,89	0,59		
Evaluating Thoughts and Ideas	Woman	118	4,05	0,59	1,58	0,117
	Male	47	3,88	0,66		
Self Observation	Woman	118	3,99	0,56	1,49	0,138
	Male	47	3,84	0,66		
Setting Reminders	Woman	118	4,03	0,69	-0,60	0,549
	Male	47	4,11	0,73		
Self Punishment	Woman	118	3,99	0,53	0,94	0,350
	Male	47	3,90	0,61		
Self-Rewarding	Woman	118	4,09	0,68	1,71	0,089
	Male	47	3,89	0,66		
Focusing Thought with Natural Rewards	Woman	118	4,03	0,63	-1,09	0,279
	Male	47	4,16	0,76		
SELF LEADERSHIP	Woman	118	4,00	0,48	0,94	0,348
	Male	47	3,92	0,53		

It was determined that the scale and sub-dimension scores of self-leadership behaviors did not differ significantly (p>0.05) according to gender.

Table 4 shows the ANOVA test results of the comparison of self-leadership behaviors scores according to grade level.

Table 4

Comparison of Self-Leadership Behaviors Scores According to Grade Level

Size	**Classroom**	**n**	**$\bar{X}$**	**SS**	**F**	**p**	**Significant Difference**

	A-1st grade	40	3,90	0,62			
Imagining Successful Performance by	B-2nd class	45	3,86	0,60			
Setting Goals for Yourself					1,65	0,181	
	C-3rd grade	50	4,08	0,57			
	D-4th grade	30	3,81	0,59			
	A-1st grade	40	3,86	0,70			
	B-2nd class	45	3,86	0,61			
Self-Talk					0,50	0,685	
	C-3rd grade	50	3,97	0,67			
	D-4th grade	30	4,00	0,58			
	A-1st grade	40	3,87	0,70			
	B-2nd class	45	3,94	0,66			
Evaluating Thoughts and Ideas					1,54	0,206	
	C-3rd grade	50	4,10	0,50			
	D-4th grade	30	4,12	0,56			
	A-1st grade	40	3,90	0,68			
	B-2nd class	45	3,90	0,62			
Self Observation					0,66	0,579	
	C-3rd grade	50	4,05	0,52			
	D-4th grade	30	3,93	0,55			
	A-1st grade	40	4,05	0,91			
	B-2nd class	45	3,88	0,66			
Setting Reminders					2,10	0,103	
	C-3rd grade	50	4,08	0,58			
	D-4th grade	30	4,28	0,55			
	A-1st grade	40	3,91	0,69			
	B-2nd class	45	3,96	0,52			
Self Punishment					1,26	0,291	
	C-3rd grade	50	4,09	0,41			
	D-4th grade	30	3,87	0,59			
	A-1st grade	40	3,88	0,69			**D>A,B**
	B-2nd class	45	3,97	0,74			
Self-Rewarding					2,89	**0,037**	
	C-3rd grade	50	4,05	0,65			
	D-4th grade	30	4,33	0,54			
	A-1st grade	40	4,04	0,79			

	B-2nd class	45	4,00	0,58	
Focusing Thought with Natural Rewards					0,490,690
	C-3rd grade	50	4,09	0,71	
	D-4th grade	30	4,18	0,56	
	A-1st grade	40	3,91	0,60	
	B-2nd class	45	3,91	0,51	
SELF LEADERSHIP					1,040,378
	C-3rd grade	50	4,06	0,42	
	D-4th grade	30	4,01	0,44	

It was determined that the sub-dimension scores of imagining successful performance by setting goals for oneself, self-talk, evaluating thoughts and ideas, self-observation, setting reminders, self-punishment, focusing thoughts with natural rewards and self-leadership scale score did not differ significantly ($p>0.05$) according to the grade level. Self-rewarding sub-dimension score showed a significant difference according to the grade level ($F=2.89$, $p<0.05$). According to the results of the LSD post hoc test conducted to determine which groups the difference is between, the self-rewarding score of the participants studying in the 4th grade is significantly higher than the score of the participants studying in the 1st and 2nd grades.

Table 5 presents the results of the two-factor ANOVA test for the joint effect of gender and grade level on self-leadership behaviors.

Table 5

ANOVA Results of Self-Leadership Behavior Scores According to Gender And Grade Level

Sub Dimensions	**Source of Variance**	**Squares Total**	**sd**	**Squares Average**	**F**	**p**
Imagining Successful Performance by Setting Goals for Yourself	Class level	0,00	1	0,00	0,01	0,910
	Gender	0,64	3	0,21	0,62	0,605
	Grade Level x Gender	1,92	3	0,64	1,85	0,140
	Error	54,43	157	0,35		
	Total	2602,41	165			
	Class level	0,06	1	0,06	0,16	0,693
	Gender	0,73	3	0,24	0,59	0,621

Self-Talk	Grade Level x Gender	2,03	3	0,68	1,65	0,181
	Error	64,70	157	0,41		
	Total	2599,22	165			
Evaluating Thoughts and Ideas	Class level	0,86	1	0,86	2,50	0,116
	Gender	1,92	3	0,64	1,87	0,137
	Grade Level x Gender	5,26	3	1,75	5,12	**0,002**
	Error	53,69	157	0,34		
	Total	2703,56	165			
Self Observation	Class level	0,59	1	0,59	1,69	0,195
	Gender	0,08	3	0,03	0,08	0,972
	Grade Level x Gender	1,98	3	0,66	1,91	0,130
	Error	54,34	157	0,35		
	Total	2630,72	165			
Setting Reminders	Class level	0,06	1	0,06	0,12	0,728
	Gender	3,20	3	1,07	2,28	0,082
	Grade Level x Gender	3,41	3	1,14	2,42	0,068
	Error	73,57	157	0,47		
	Total	2792,50	165			
Self Punishment	Class level	0,07	1	0,07	0,25	0,619
	Gender	0,42	3	0,14	0,46	0,710
	Grade Level x Gender	1,67	3	0,56	1,84	0,141
	Error	47,26	157	0,30		
	Total	2648,31	165			
Self-Rewarding	Class level	2,01	1	2,01	4,61	0,033
	Gender	5,25	3	1,75	4,02	0,009
	Grade Level x Gender	1,68	3	0,56	1,29	0,281
	Error	68,46	157	0,44		
	Total	2764,22	165			
Focusing Thought with Natural Rewards	Class level	0,49	1	0,49	1,15	0,286
	Gender	0,90	3	0,30	0,71	0,550
	Grade Level x Gender	5,85	3	1,95	4,57	**0,004**
	Error	67,00	157	0,43		
	Total	2806,75	165			

	Class level	0,02	1	0,02	0,61	0,434
	Gender	0,05	3	0,02	0,55	0,648
SELF LEADERSHIP	Grade Level x Gender	0,31	3	0,10	3,73	**0,013**
	Error	4,37	157	0,03		
	Total	334,18	165			

According to Table 5, it was found that gender and grade level did not have a common effect on the behaviors of setting goals for oneself and imagining successful performance, self-talk, self- observation, setting reminders, self-punishment, and self-rewarding ($p>0.05$).

Morover it was determined that gender and grade level had a common effect on the behavior of evaluating thoughts and ideas ($F(3;157) = 5.12$; $p<0.05$). According to the Bonferroni multiple comparison results in Table 6, the score of male participants in the 4th grade on the behavior of evaluating thoughts and ideas is significantly higher than the score of male pre-service teachers in the 1st grade.

Additionally gender and grade level had a common effect on the behavior of focusing thoughts with natural rewards ($F(3;157) = 4.57$; $p<0.05$). According to the results of multiple comparisons (Bonferroni) between pores in Table 6;

- The 4th grade male participants' score for the behavior of focusing thought with natural rewards was significantly higher than the score of the 2nd grade female pre-service teachers.
- The 4th grade male participants' score for the behavior of focusing thoughts with natural rewards is significantly higher than the score of 4th grade female pre-service teachers.

Also gender and grade level had a common effect on self- leadership behaviors ($F(3;157) = 3,73$; $p<0,05$). According to the results of multiple comparisons (Bonferroni) in Table 6;

- The 4th grade male participants' self-leadership behaviors score is significantly higher than the score of the 1st grade male pre-service teachers.
- The 4th grade male participants' self-leadership behaviors score is significantly higher than the score of the 3rd grade male pre-service teachers.
- The 4th grade male participants' self-leadership behaviors score is significantly higher than the score of 4th grade female pre-service teachers.

Table 6 shows the results of the Bonferroni post-hoc test for the comparisons of pore means in the tests where the joint effect of gender and grade level on self-leadership behaviors was significant.

Table 6

Comparison Results of Pore Averages

Sub Dimensions	**Pore (I)**	**Pore (J)**	**Difference**	**p**
Evaluating Thoughts and Ideas	1st grade - Male	1st grade - Female	-0,323	1,000
		2nd grade - Women	-0,354	1,000
		2nd grade - Male	0,017	1,000
		3rd grade - Female	-0,511	0,116
		3rd grade - Male	0,010	1,000
		Grade 4 - Women	-0,192	1,000
		4th grade - Male	-0,744	**0,022**
Focusing Thought with Natural Rewards	4th grade - Male	1st grade - Female	0,542	0,388
		1st grade - Male	0,709	0,112
		2nd grade - Women	0,657	**0,049**
		2nd grade - Male	0,592	0,836
		3rd grade - Female	0,511	0,338
		3rd grade - Male	0,767	0,247
		Grade 4 - Women	0,861	**0,012**
SELF LEADERSHIP	4th grade - Male	1st grade - Female	0,218	0,180
		1st grade - Male	0,452	**0,013**
		2nd grade -		

Women	0,278	0,071
2nd grade - Male	0,384	0,058
3rd grade - Female	0,099	0,507
3rd grade - Male	0,430	**0,047**
Grade 4 - Women	0,387	**0,031**

Findings on the Relationship between Self-Leadership Behaviors

Table 7 presents the results of Pearson correlation analysis of the relationship between self- leadership behaviors.

Table 7

The Relationship between Self-Leadership Behaviors

Dimensions	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1-Imagine Successful Performance by Setting Goals for Yourself	0,66**	0,62**	0,75**	0,45**	0,73**	0,57**	0,47**	0,89**
2-Self Speech	1	0,61**	0,55**	0,49**	0,46**	0,61**	0,55**	0,78**
3-Evaluating Thoughts and Ideas		1	0,59**	0,58**	0,57**	0,75**	0,53**	0,83**
4-Self Observation			1	0,49**	0,80**	0,51**	0,51**	0,85**
5-Determining Reminder				1	0,45**	0,52**	0,65**	0,68**
6 - Self Punishment					1	0,41**	0,44**	0,80**
7 - Rewarding Yourself						1	0,41**	0,75**
8-Focusing Thought with Natural Rewards							1	0,67**
9- SELF LEADERSHIP								1

*p<0,05 **p<0,01

According to Table 7, self-talk (r=0.66; p<0.05), evaluating thoughts and ideas (r=0.62; p<0.05), self-observation (r=0.75; p<0.05), setting reminders (r=0.45; p<0.05), self-punishment (r=0.73; p<0.05), self-rewarding (r=0.57; p<0.05), and focusing thoughts with natural rewards (r=0.47; p<0.05).

Furthermore there is a positive correlation between the self-talk score and the scores of evaluating thoughts and ideas (r=0.61; p<0.05), observing oneself (r=0.55; p<0.05), setting reminders (r=0.49; p<0.05), punishing oneself (r=0.46; p<0.05), self-rewarding (r=0.61; p<0.05), focusing thoughts with natural rewards (r=0.55; p<0.05).

In addition to that there was a positive and significant relationship between the score of evaluating thoughts and ideas and the scores of self-observation (r=0.59; p<0.05), setting reminders (r=0.58; p<0.05), self-punishment (r=0.57; p<0.05), self-rewarding (r=0.75; p<0.05), and focusing thoughts with natural rewards (r=0.53; p<0.05).

At the same time it was found that there was a positive and significant relationship between the self-observation score and the scores of setting reminders (r=0.49; p<0.05), self-punishment (r=0.80; p<0.05), self-rewarding (r=0.51; p<0.05), and focusing thoughts with natural rewards (r=0.85; p<0.05).

On top of those findings, it was found that there was a positive and significant relationship between the reminder setting score and self-punishment (r=0.45; p<0.05), self-rewarding (r=0.52; p<0.05), and focusing thoughts with natural rewards (r=0.65; p<0.05) scores.

Moreover it was found that there was a positive and significant relationship between self-punishment score and self-rewarding (r=0.41; p<0.05), and focusing thoughts with natural rewards (r=0.44; p<0.05) scores.

Finally there is a positive and significant relationship between the self-reward score and the score of focusing thoughts with natural rewards (r=0.41; p<0.05).

Discussion and Results

In the last century, studies on leadership have increased and new research has led to the emergence of new types of leadership. The increasing importance of the human factor has increased this diversity and has found a wide field of study. One of the modern leadership approaches is self- leadership. This understanding of leadership, which explains that the person who is attributed as a leader initiates the leadership in himself/herself and can direct his/her perceptions and behaviors by controlling himself/herself, is considered to be very important for prospective teachers who will be in a leadership position as teachers in the future. In this context, the self-leadership behaviors of Çanakkale Onsekiz Mart University, Faculty of Education, Department of Social Studies Teaching students were measured. In the light of the findings, it was found that there was a positive and significant relationship between the dimension of imagining successful performance by setting goals for oneself and the dimensions of self-talk, evaluating thoughts and ideas, observing oneself, setting reminders, punishing oneself, rewarding oneself, and focusing thoughts with natural rewards; there is a positive and significant relationship between the dimension of self-talk and the dimensions of evaluating thoughts and ideas, self-observation, setting reminders, self-punishment, self-punishment, self-reward, focusing thought with natural rewards; there is a positive and significant relationship between the dimension of evaluating thoughts and ideas and the dimensions of self-observation, setting reminders, self-punishment, self-punishment, self-reward, focusing thought with natural rewards; There is a positive and significant relationship between the dimension of self-observation and the dimensions of setting reminders, self-punishment, self-rewarding, self-rewarding, focusing thought with natural rewards; there is a positive and significant relationship between the dimension of setting reminders and the dimensions of self-punishment, self-rewarding, focusing thought with natural rewards; there is a positive and significant relationship between the dimension of self-punishment and the dimension of self-rewarding, focusing thought with natural rewards; and there is a positive and significant relationship between the dimension of self-rewarding and the dimension of focusing thought with natural rewards.

To put it in the language of statistics; there is a positive correlation between the self-talk score and the scores of evaluating thoughts and ideas ($r=0.61$; $p<0.05$), observing oneself ($r=0.55$; $p<0.05$), setting reminders ($r=0.49$; $p<0.05$), punishing oneself ($r=0.46$; $p<0.05$), self-rewarding ($r=0.61$; $p<0.05$), focusing thoughts with natural rewards ($r=0.55$; $p<0.05$). There was a positive and significant relationship between the score of evaluating thoughts and ideas and the scores of self-observation ($r=0.59$; $p<0.05$), setting reminders ($r=0.58$; $p<0.05$), self-punishment ($r=0.57$; $p<0.05$), self-rewarding ($r=0.75$; $p<0.05$), and focusing thoughts with natural rewards ($r=0.53$; $p<0.05$). It was found that there was a positive and significant relationship between the self-observation score and the scores of setting reminders ($r=0.49$; $p<0.05$), self-punishment ($r=0.80$; $p<0.05$), self-rewarding ($r=0.51$; $p<0.05$), and focusing thoughts with natural rewards ($r=0.85$; $p<0.05$). It was found that there was a positive and significant relationship between the reminder setting score and self-punishment ($r=0.45$; $p<0.05$), self-rewarding ($r=0.52$; $p<0.05$), and focusing thoughts with natural rewards ($r=0.65$; $p<0.05$) scores. It was found that there was a positive and significant relationship between self-punishment score and self-rewarding ($r=0.41$; $p<0.05$), and focusing thoughts with natural rewards ($r=0.44$; $p<0.05$) scores. And finally there is a positive and significant relationship between the self-reward score and the score of focusing thoughts with natural rewards (r=0.41; p<0.05).

Although studies on self-leadership have found a place in the literature, the relationship between self-leadership and another variable has been examined. Only Bozyiğit and Çetin (2019) examined the self-leadership levels of Sport Sciences students and obtained results parallel to our study. In this context, in order to be more specific for other studies, in our study, it was preferred to look at the participants' perceptions of self-leadership instead of looking at the relationship of self-leadership with another variable.

In Garipağaoğlu and Güloğlu's (2015) study, pre-service teachers' self-leadership skills, learned empowerment and locus of control were considered as predictors. Göksoy et al. (2014) examined the relationship between teachers' self-leadership roles and organizational citizenship behaviors. In the said study, it was concluded that teachers' self-leadership behaviors were high and it was understood that it was in parallel with our research. Fidan (2020), who examined the relationship between self-leadership and happiness according to teachers' self-leadership perceptions, concluded that teachers' self-leadership perceptions were high. This result is also in parallel with our study. Fidan (2019) examined the relationship between teachers' individual innovation and self-leadership and concluded that their self-leadership behaviors were high and reached the same result as our study.

The subject of self-leadership in the literature is mostly self-efficacy, organizational commitment, ethics, personality traits, job satisfaction, personnel empowerment, entrepreneurship, performance, organizational change, creativity, teams with self-management ability, team success, sustainability (Neck & Houghton, 2006; Goldsby et al., 2021) seems to be considered together with issues such as. The results of Neck and Houghton (2006) and Goldsby et al. (2021) are in line with our results.

Hauschildt and Konradt (2012), who are trying to Decipher the possible effects of self-leadership understanding in teams, stated that self-efficacy and self-leadership phenomena are related considering the studies that found positive relationships between self-leadership and team performance. According to them, the perception of self-efficacy mediates the relationship between self-leadership and high performance. Prussia et al. (1998) examined the mediating role of self-efficacy in the relationship between self-leadership and performance and found that both self-leadership and self-efficacy have a positive relationship with performance separately. Carmeli et al. (2006), who investigated the relationship between self-leadership strategies and innovative behavior in universities, found that self-leadership strategies increase innovative behavior. The results of Hauschildt and Konradt (2012) and Prussia et al. (1998) are in line with the results obtained. In the literature, significant results have been obtained when the issue of self-leadership is addressed in individual and group contexts (Goldsby et al., 2021; Neck & Houghton, 2006). On the other hand, the results obtained at the organizational level are far from being significant.

Although pre-service social studies teachers' self-leadership behaviors were found to be significant, ideally, they should perceive and behave in a perfect way with self-motivated, self-confident behaviors. The self-leadership behaviors exhibited by pre-service teachers will help them to exhibit self-motivation in their students when they become teachers. Due to the self-developing and transforming characteristics of teaching, they will not stay away from the developments in the world and the continuity of their self-leadership behaviors will be ensured. In this way, it is thought that they will show not only self-leadership behaviors but also transformative, visionary and innovative leadership characteristics that are fully open to development.

Recommendations

Although there are no studies on leadership for social studies teachers and pre-service teachers in the national and international literature, teacher (instructive) leadership has generally been addressed for teachers and pre-service teachers. In this context, in the national and international literature, this study is considered important as it is the first to address the self-leadership behaviors of pre-service social studies teachers.

According to the findings of the research, the following suggestions can be made;

- Certificate programs can be organized for pre-service teachers to develop their self-leadership behaviors.
- Research on self-leadership with teachers and pre-service teachers can be diversified.
- Elective courses on this subject can be offered in faculties of education in order to train teachers equipped with leadership and self-leadership qualities.

Compliance with Ethical Standard

The questionnaire study, planned to be applied on pre-service teachers, was ethically approved by the decision of Çanakkale Onsekiz Mart University School of Graduate Studies Scientific Research Ethics Committee dated 30.03.2023 and numbered 04/72.

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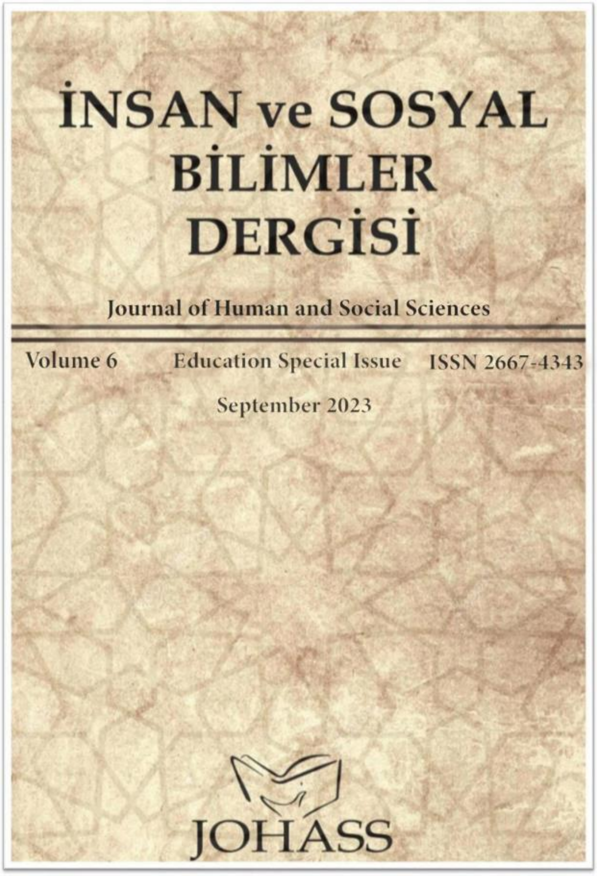

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A Study on the Preparation of Textbooks for the Ottoman Sıbyan Schools in the Late 19th Century

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A Study on the Preparation of Textbooks for the Ottoman Sıbyan Schools in the Late 19th Century

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Abstract

The nineteenth century witnessed remarkable developments in primary education. The vital importance of the primary education in various aspects was emphasised at every opportunity. In this context, reform in this level of education was one of the issues on the agenda of statesmen. Accordingly, close attention began to be paid to the sıbyan schools. Education in these schools was made compulsory in the above-mentioned century. Efforts were made to ensure that children, who had reached the age of education, acquired some basic knowledge. On the other hand, important steps were taken to improve teaching methods, renew programmes and prepare appropriate textbooks for these children. The publication of the Regulation for Writing and Translation [Telif ve Tercüme Nizâmnâmesi] dated 14 May 1870 [12 Safar 1287] was an important step especially in the context of the aforementioned textbooks. In this sense, the present study focuses on the contents, number of pages, prizes and writing duration of the textbooks to be put into the competition, especially for sıbyan schools, in line with the declaration attached to the end of the relevant regulation, without ignoring the provisions of it regarding the books to be written or translated. This regulation and the declaration attached to it constitute the main material of the study, but the literature on the subject is also included in the evaluation. As a result of the analysis, it was seen that 11 textbooks were aimed to be prepared for sıbyan schools and important provisions were determined in this context. This endeavour constituted a concrete example of the close relationship between education and power.

Keywords: The regulation for writing and translation, Ottoman sıbyan schools, textbooks

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Introduction

The Ottoman Empire, which had long resisted the dissolution of its traditional structure, gradually recognised the necessity of adapting to change. The nineteenth century marked a crucial turning point in this regard (Uyanık, 2006). During this century, the Ottoman people also saw their own change as a necessity in a changing world and realised that it was necessary to focus on education fundamentally within this framework (Ortaylı, 2009, p. 146).

The necessity of raising qualified individuals capable of adapting to changes led to the transformation of education into a public service. As other modernising states, the Ottoman Empire also acknowledged education as a public service in the nineteenth century. In this process, almost a magical power was attributed to education to fix the numerous issues detailed in reports from the provinces to Istanbul. Furthermore, it was considered the main apparatus for progress, economic growth and social penetration. From the second half of the nineteenth century onwards, the Ottoman ruling elites began to see education as an ideological apparatus for ensuring political unity, increasing social welfare and raising individuals loyal to the state (Fortna, 2005; Uyanık, 2006).

As part of this overarching mission for education, it became imperative to elevate its status beyond its current position. Primary education, serving as the bedrock of the entire educational system, took centre stage in this effort. Indeed, reforming primary education institutions and improving the quality of instruction therein became a top priority for policymakers. Sıbyan schools, in particular, received significant attention. Compulsory education in such schools was introduced during the same century (Uyanık, 2006).

The Regulation of Public Education [Maârif-i Umûmiyye Nizâmnâmesi] dated 1 September 1869, marked a significant milestone in the reform of education. This regulation established a legal and institutional framework for educational reform, introduced a system and set the stage for future plans (Vurgun, 2022, p. 775). It not only intended to modernise education, but also to set a standard for it. Under this regulation, the Ottoman central administration defined the framework of education (Gürkan, 2017, p. 205). According to the regulation, sıbyan schools provided education for a duration of four years. Boys and girls were required to attend the school between the ages of 7-11 and 6-10, respectively. The regulation also outlined procedures for handling cases of absenteeism or failure to send children to school, ensuring school attendance. The regulation’s provisions reflected an ambition to expand sıbyan schools throughout the empire. As outlined in the regulation, the curriculum in these schools included courses such as *Alphabet* [Elifba], *The Holy Qur'an* [Kur'an-ı Kerim], *Tajwîd* [Tecvîd], *Catechism* [İlm-i Hâl], *Morality* [Ahlâk], *Hand Writing* [Yazı], *Arithmetic* [Hesâp], *Brief Ottoman History* [Muhtâsar Târih-i Osmânî], *Brief Geography* [Muhtasar Coğrafya] and *Useful Knowledge* [Ma'lûmât-ı Nâfia] (Maârif-i Umûmiyye Nizâmnâmesidir, *Düstûr*, Tertîb-i Evvel-Cüz-ü Sânî, 1289, pp. 184-186).

In accordance with this regulation, it was deemed appropriate to improve the teaching methods of all schools both in Istanbul and in other parts of the Ottoman Empire, and to gradually write or translate textbooks to be taught in these schools. Specifically, there was a plan to prepare engaging and straightforward textbooks for sıbyan schools that would captivate, rather than bore, the children (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 2). A pivotal step in this process was the publication of the Regulation for Writing and Translation [Telif ve Tercüme Nizâmnâmesi] dated 14 May 1870 [12 Safar 1287]. This regulation contained crucial provisions related to writing or translation of books. In addition, it included a declaration specifying the details about the 11 textbooks to be put into competition, particularly for sıbyan schools. These details were related to the content of the textbooks, their number of pages, the prizes they would receive according to their ranking in the competition, and writing duration of them. The present study aims to make a comprehensive evaluation by focusing on these details, without ignoring the provisions outlined in the relevant regulation regarding the writing or translation of books. The literature review showed that this issue has not been addressed in detail. In this respect, the current study will contribute to textbook research in line with its aim.

Books to be Written or Translated

The Regulation for Writing and Translation divided the books to be written or translated into three groups. They were as follows:

1. Books that are put into competition by assigning a monetary prize according to their size and complexity.
2. Books that are outsourced without prior orders.
3. Books translated or written by an individual for a predetermined price (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 4).

In the provisions concerning books eligible for the competition, it was specified that the declaration and conditions for these books would be announced quarterly, starting in *Muharram*, through newspapers or special documents. Three categories of prizes were established for these books. As such, the top-performing book would receive the first prize, while the second-best would be granted the second prize. The third-place book would be recognised with an honorable mention [referred to as "zikr-i cemil"]. In situations where numerous books deserving of the first prize emerged, it was decided that the second prize would not be awarded. Instead, the funds allocated for the second prize would be combined with the first prize money and distributed equally among the authors. If there were many books deserving of the second prize, it was considered appropriate to equally distribute this prize among the authors. The regulation also took into account books that did not qualify for any prize. In other words, it stipulated that authors of books not deemed worthy of any of the aforementioned prizes, but from which some benefits were anticipated through their publication, would not receive a prize. Instead, they would be granted a suitable monetary incentive to stimulate their enthusiasm (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 5-6).

One of the most crucial aspects of the competition was maintaining anonymity. In simple terms, the authors or translators of the books entered into the competition were not supposed to know each other's identities. To achieve this, it was decided not to disclose their names. Instead, a distinct phrase would be inscribed on each book to distinguish them from one another. Additionally, each author, using their own seal and signature, would enclose a letter within an envelope, sealing it securely. They would also write the same distinguishing phrase on this envelope as found on their respective book. Ensuring the anonymity of the authors' identities was deemed of utmost importance, and it was clearly stated that if the name of any author was intentionally or accidentally revealed, their book would be disqualified. This policy of anonymity also extended to authors of books that were not deemed deserving of any prize. These authors had the option to have their books collected through confidential procedures without disclosing their names or titles. Furthermore, authors of rejected books retained the right to publish their works independently if they wished to do so (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 6).

In preparation for the competition, authors were required to discreetly deliver their books to the office of a head clerk in the Department of Science [Dâire-i İlmiyye] using a method of their choice. It was specified that the phrase on these books, delivered in this manner, would be meticulously documented in a special record book, and a unique identification number would be assigned based on the order of receipt. This identification number needed to be inscribed on both the book itself and the sealed accompanying envelope.

Timely delivery of the books to the appropriate department was a critical consideration. It was explicitly noted that books not delivered punctually would not be accepted. Furthermore, it was outlined that the books arriving on schedule would undergo evaluation by the Council of Education [Meclis-i Maârif]. Those meeting the necessary criteria would be accepted, their prizes determined, and the date for the distribution of these prizes would be announced via newspapers. A special significance was attributed to the prize distribution day. According to the information found in the regulation, on this occasion, the Minister of Education, along with other deputies and representatives from prominent officials, would be in attendance at the Grand Council of Education [Meclis-i Kebir-i Maârif]. The accepted books would be presented, and in the presence of the assembled participants, the seals on the accompanying envelopes would be opened, revealing the identities of the authors and presenting them with their well-earned prize certificates (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 7-8).

Books offered from external sources, without prior orders, were essentially categorised into two main groups: those intended for schools and those aimed at the general public. Books for schools were further divided into three distinct types, each with its designated prize. The first type encompassed books recommended for classroom use, and it was specified that these books would receive the top prize. The second type included books highly regarded [takdir] for school utilisation, and it was stated that the second prize would be conferred upon them. The third type consisted of books officially authorised for educational purposes, and the authors of these books were acknowledged with an honorable mention. Books intended for the general public were similarly divided into three types, with a prize assigned to each. The highest-rated book received the first prize, while the next in line was granted the second prize. The third book in this category earned recognition through an honorable mention alone. It was decreed that authors of prized books would provide ten complimentary copies of each to the Ministry of Education [Maârif Nezâreti]. These books would be placed in the libraries of the Grand Council of Education, the University [Dârülfünûn], and other libraries deemed necessary (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 8-9).

Similar to other books, those intended for translation or writing for a predetermined price were also governed by specific provisions. According to these provisions, individuals desiring to write or translate a book for an agreed-upon price committed to do so in accordance with a sample they would present to the Grand Council of Education. In return, they would receive the full contracted payment. It was crucial for these books to be delivered on time; otherwise, a warning was issued that they would be rejected, and the payment would not be processed. To inform prospective suitors, it was deemed appropriate to announce the books available for ordering. Additionally, it was decided that ordered books would be divided into suitable chapters, and payments would be made based on completed chapters. Authors would submit their finished chapters to the council as per the specified schedule. If these chapters were found to align with the provided sample during examination, the corresponding agreed-upon payment for those chapters would be disbursed, and the submitted chapters would be retained. Adherence to the established schedule was paramount. If an author failed to deliver a chapter on time without a valid excuse, a grace period of fifteen days would be granted. Afterward, the uncompleted portion of the contract would be declared null and void, and the book would be assigned to another party. It was also mandated that a certified copy of the protocol outlining the terms and conditions for writing or translating the books would be provided to the individuals undertaking the work. Moreover, in accordance with the regulation, authors and translators had no rights on these books beyond their names. The Ministry of Education undertook responsibility for the printing and sale of these books, and it was decided that fifteen complimentary copies would be given to the author or translator (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 9-11).

The regulation's provisions pertaining to the three groups of books mentioned above primarily addressed the inscriptions required on these books. In addition, it outlined the process for awarding certificates to winning authors and the disbursement of cash prizes. It placed significant emphasis on recording the names of authors and translators of prized books, the date of the decision, and the prize amounts in a comprehensive record known as the award book. Furthermore, it stipulated that the names of the authors or translators in question would be inscribed on decorative plaques and prominently displayed in the departments of the Grand Council of Education, the University, and other suitable locations. Procedures for disbursing prize money when authors or translators choose to remain anonymous were also detailed. However, it was important to note that prize money may either be left to the education treasury [maârif veznesi] or assigned as a prize for another book. The regulation also allowed for individuals of goodwill and generosity to pledge a monetary sum for a book to be written or translated by a competent individual. Such books can be ordered in the benefactor's name or submitted for competition. Also, it was emphasised that these individuals have the option to supplement the prize established by the Ministry of Education with an additional amount. Lastly, it specified that the reasons leading to the rejection of books would be documented on a note and provided to the owner along with the book (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 11-14).

Textbooks Specific to Sıbyan Schools

The Regulation for Writing and Translation included a declaration that detailed the specifications of textbooks eligible for entry into the competition for sıbyan schools. This declaration covered aspects such as their content, number of pages, the prizes based on competition ranking, and writing duration. Among these textbooks, the *Alphabet* [Elifba] was the first of a total of 11. It began by addressing to the signs that certain letters [*wāw*, *yā'*, *alif*, *hā'*, *kāf*] should have according to the way/place of use and language [Arabic-Persian]. Subsequently, in order to facilitate gradual syllable learning, it was argued that the book should be included phrases comprising straightforward and easily understandable words. Furthermore, it was decided to include new signs alongside familiar ones in the first half of the textbook, with the latter half exclusively featuring the new signs. The declaration also emphasised the flexibility of including any methods that might aid in spelling, and even relevant illustrations within the textbook (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 14-15).

To enhance the process of spelling, the creation of suitable signs for the previously mentioned letters was proposed. However, it was emphasised that these signs should align with the established method. It was strongly advocated that the words selected for use should, whenever possible, be drawn from the vocabulary that children are familiar with and use in their daily lives. Besides, their meanings should correspond to the children's level of comprehension. When it came to composing words and phrases, the focus was initially on simplicity and ease, followed by a gradual progression towards more complex and challenging forms. The goal was to ensure that these words and phrases were engaging and appealing to children. In essence, the vision for this textbook was to enable a child to master syllables within a span of six months, ultimately allowing them to read Turkish texts containing simple and familiar phrases. This textbook was intended to have a length of approximately 100 pages. The top prize for this textbook was set at 5000 kurus, with the second prize at 3000 kurus. Authors were given a deadline of four months to complete their work (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 15-16).

Another one of these textbooks was titled *Morality* [Ahlâk]. This particular textbook was designed to commence with a concise introduction explaining the subject and objectives of the field of morality. It delved into various topics, including the religious obligations of individuals, their responsibilities towards their parents, teachers, fellow humans, their own well-being, those of authority [Ulu'l Amr], and their homeland. *Morality* was also devoted to topics such as the necessity of obeying laws and duties towards animals and other living beings. This textbook matched *Alphabet* [Elifba] in terms of the number of pages, prize amounts, and writing duration (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 16).

Practical Virtues [Fazâil-i Fiiliye] was yet another textbook intended for inclusion in the competition for sıbyan schools. This textbook focused on commendable actions and behaviours highlighting moral virtues among the Muslims and other nations in the past. Similar to the *Morality* textbook, it was considered appropriate to divide these topics into chapters. Given that similar content can be found in Siyar, History, and Morality books, it was advised to conduct thorough research and carefully select suitable material. It was also emphasised that existing books on this subject could serve as valuable sources for content. The number of pages, prize amounts, and writing duration for this textbook mirrored those established for the first two textbooks (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 17).

Turkish Grammar [Kavâid-i Türkiye] was the fourth textbook in this series. It was structured into two parts. The first part, commencing with an introduction, focused on noun, adjective, pronoun, verb, preposition, and phrase. The second part was dedicated to topics such as agreement, complements, and sentence connections. According to the declaration in question, each rule, exception, and caution in this textbook should have accompanied by a set of illustrative examples. As outlined in the declaration, the complexity of the examples to be given and the complexity of the rules should be equivalent. This textbook was intended to cover a limited number of rules, but a large number of examples. This approach was justified by the idea that learning rules becomes easier with multiple examples and that it facilitates the acquisition of spelling and meanings of words used in this context. This textbook specifically focused on the rules of the Turkish language. However, even those rules originating from Arabic and Persian, widely recognised and necessary to be known in the Turkish language, would be separately compiled, explained with relevant examples, and appended to the end of this textbook as an additional section (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 17-19).

In addition to this textbook, a *Spelling Booklet* was slated for development. This booklet was designed to encompass all the essential components for enabling students, with the guidance of their teachers, to easily grasp the nuances of their mother tongue. To achieve this, it was vital to steer clear of the complex rules of language. Furthermore, it was stressed that the examples provided should be drawn from the works of reputable authors. The *Turkish Grammar* textbook was expected to span a minimum of 150 pages, while the *Spelling Booklet* was to consist of 100 pages. For their respective contributions, the first book was set to receive a prize of 12,000 kurus, and the second, 8,000 kurus. The writing duration for the *Turkish Grammar* textbook was stipulated at 6 months (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 20).

The fifth textbook in this series was *Geography* [Coğrafya]. The planned topics for inclusion in this textbook were as follows: general insights into the shape, position, and movement of the Earth; the various circles assumed on the Earth; geographical terms; human species; governmental structures, and religious sects; detailed information about the five continents, commencing with Europe, covering aspects like borders, populations, and more; the boundaries and extent of the Ottoman lands, along with descriptions of their mountains, rivers, lakes; administrative divisions, both historical and contemporary, within the Ottoman territories; an overview of the nations and various communities residing within these regions; features of each province, such as its boundaries and populations, soil and industrial products, central administration, sanjaks, fortified areas; railways and roads, postal and telegraph networks within the Ottoman territories; information about the Ottoman State’s regime, armed forces, judicial system, general education; a table indicating its military organisation, provinces and sanjaks (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 20-21).

The geography textbook was to be structured into multiple lessons, with each lesson concluding with relevant questions. Additionally, where applicable, historical knowledge would be incorporated into the material. This textbook was intended to span 100 pages, and prizes of 5000 kurus for the first one and 3000 kurus for the second one were established. Authors were allotted a four-month timeframe for the preparation of this textbook (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 21-22).

The sixth textbook in this series focused on *Ottoman History* [Tarih-i Osmanî]. It was designed to commence with an introduction about how the Ottoman State emerged and the situation of the states and nations in Anatolia during that period. This comprehensive history textbook was planned to cover significant events spanning from the inception of the Ottoman State to the current date [1870], a chronological table displaying the birth, accession, and death dates of all Ottoman sultans, a timeline of the key events featured in the book, and a map illustrating the Ottoman territories in Europe, Asia, and Africa. It was also decided to divide the reign of each of the sultans, who ascended to the throne until the current date [1870], into a section. According to the declaration in question, events would be portrayed objectively. However, issues related to patriotism were found praiseworthy. The narrative style of the textbook was intended to resemble a story, and it was decided that the textbook would not pass judgment but rather highlight virtues and condemn inappropriate or unsightly actions. Furthermore, it was underscored that the names of cities and statesmen, and dates would be mentioned only in the context of important events in this textbook. The number of pages, prize amounts, and writing duration for this textbook were the same as the previous textbook (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 22-23).

Another textbook in this series was titled *Composition* [İnşâ]. This particular textbook was designed to commence with a comprehensive introduction to the art of composition and the fundamental principles of effective correspondence. It primarily focused on providing examples of letters, petitions, and promissory notes. However, it was emphasised that this textbook would not delve into the lengthy, intricate, and often challenging topics typically encountered in prose [nesir] books. Instead, the content would consist solely of short letters, ranging from four to five lines, and eventually, extending to one page. In this context, the phrases used needed to be straightforward and comprehensible for children. The letters featured in the textbook were organised into sections such as congratulations, expressions of gratitude, advice, condolences, and similar categories. This textbook was intended to span 100 pages, with a first-place prize of 5000 kurus and a second-place prize of 3000 kurus. Authors were given a four-month timeframe for the preparation of this textbook (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 23-24).

The eighth textbook in this series was titled *Poetical Literature* [Edebiyât-ı Manzûme]. This textbook was designed to commence with a brief introduction covering the definition, subject, purpose, and other key characteristics of poetry. Its primary focus was on various forms of poetry, including supplications [münacat], praise for the Prophet, tributes to rulers, and a wide range of poems composed in diverse rhymes and meters. The poems themselves didn't require restructuring; however, they needed to be carefully selected from the works of renowned poets, with the poet's name indicated below each poem. It was advised that the chosen poems should adhere to commonly accepted standards of etiquette, avoiding words and thoughts that deviate from general decorum. This textbook was planned to have the same number of pages, prize amounts, and writing duration as the previous textbook. (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 24).

The textbook titled *Orthographical Exceptions* [Şevâzz-ı İmlâ] focused on words that deviated from orthographic rules, such as “lakin,” “kezalik,” and “hâhiş”. The primary goal of this textbook was to make it easy for children to grasp and understand these words. To achieve this, it was decided that the textbook would include a table featuring the orthography and pronunciation of these words, their meanings, and the language from which they originated. To provide a clear example for the authors, a template was presented. This textbook was planned to contain some short phrases and, if possible, brief stories related to the words featured in the template. It would be divided into a suitable number of lessons, with each lesson covering four or five words and spanning approximately two pages of phrases that incorporated these words. Furthermore, each lesson would incorporate previously learned vocabulary to reinforce understanding. In cases where the reasons for these non-standard orthographies were known, brief explanations would be provided. Both the first and second of this textbook, expected to be between 30 to 40 pages in length, would be awarded prizes of 4000 and 3000 kurus, respectively. Authors were given a four-month timeframe to complete this textbook (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 25-26).

The textbook *Useful Knowledge* [Ma’lûmât-ı Nâfia] was conceived as a comprehensive collection of useful knowledge spanning various fields, including Astronomy, Geography, History, Physics, Chemistry, Geology, Morality, and more. Therefore, the topics covered within this textbook did not need to be directly related to each other. It was designed to function as an engaging storybook for children, offering an enjoyable reading experience. Given this purpose, it was decided that the content would be presented in a simple and concise manner, tailored to pique children’s curiosity and hold their interest. This textbook was intended to span 100 pages, with a first-place prize of 5000 kurus and a second-place prize of 3000 kurus. Authors were given a four-month timeframe to complete this textbook (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, p. 26).

The final textbook in this series was the *Calligraphy* [Meşk Mecmûası]. This textbook was designed to commence with an introductory section covering the selection and preparation of calligraphic tools such as pens, ink, paper, and their usage, alongside various calligraphic techniques. It was dedicated to a range of specific topics, which can be outlined as follows: Vertical, horizontal, and oblique extensions [keşide] in accordance with the rules of *Thuluth* [Sülüs] script; the bowls found at the end of some muqattaa letters; only the front parts of some muqattaa letters; varieties of muqattaa letters; dots, and vowel points; words comprising two, three, and four letters; Arabic and Turkish phrases focused on moral enhancement; Arabic and Turkish phrases in the *Naskh* [Nesih] script; Turkish phrases specifically in the *Riqʿah* [Rik'a] script; phrases presented in the *Dīwānī* [Divâni] script; Persian and Turkish phrases in the *Taʿlīq* [Ta'lik] script. In addition to these topics, the textbook aimed to incorporate various methods that would facilitate the learning of calligraphy. The prize amount and writing duration for this textbook mirrored those of the preceding textbook in the series (Meclis-i Kebir-i Maârif-Dâire-i İlmiyye, 1287, pp. 27-28).

Discussion and Results

There is more than one definition of the concept of textbook. This confirms that the textbook does not have a universally accepted definition (Marsden, 2001, pp. 6-8). Typically, textbooks are crafted in alignment with an official curriculum. They belong to the category of books that have a broad readership, serving not only as a reflection of the authors' viewpoints but also embodying an official, or at the very least, a consensus-driven perspective (Copeaux, 2000, p. 3). Textbooks are as important as rituals especially in transmitting the ideology of the state. Official discourse, transmitted through both textbooks and rituals in public schools, influencing the implicit and explicit curriculum, enables individuals to understand their roles and positions in society (Meşeci, 2007, p. 1).

Textbooks play a pivotal role in the broader process of socialisation, encompassing both general and, importantly, political socialisation (Alkan, 2005, p. 131). They act as a significant instrument that determine the boundaries of "legitimate knowledge" in a country, transmitting and continually reproducing it. Through their content, structure, and language, textbooks convey crucial messages to their readers (Çayır, 2014, p. 1). Given these distinctive characteristics and more, textbooks have consistently occupied a central position, attracting the attention of political authorities. Particularly since the nineteenth century, with the expansion and widespread accessibility of education, the interest of governments in textbooks has amplified (Gündüz, 2023, p. 77). The approach of the Ottoman Empire in this process was quite remarkable.

Prior to the Tanzimat Period in the Ottoman Empire, it was difficult to identify the existence of textbooks in the modern sense. Children attending sıbyan schools primarily encountered parts from *the Holy Qur'an*, *the Elifbâ Cüzü*, and the widely used reading book of Birgivî Mehmed Efendi. The initial printed materials designed for educational purposes consisted of compact Persian-Ottoman and Arabic-Ottoman dictionaries, grammar-books, catechisms, and technical books, some of which were translated from foreign languages, taught primarily in military professional schools. Nonetheless, textbooks specifically crafted for civilian educational institutions began to spread from the Tanzimat Period onwards. During this period, the issue of the preparation and regulation of textbooks by the central administration was constantly on the agenda. Consequently, the textbooks incorporated into official school curricula started to be determined by relevant state institutions (Nurdoğan, 2014, pp. 85-86; Somel, 2010, pp. 236-238).

In this direction, a series of decisions were made and comprehensive studies were conducted within various councils, associations, and committees. Thereafter, the responsibility for textbook preparation was delegated to the Department of Science, operating within the framework of the Grand Council of Education in accordance with the Regulation of Public Education (Gündüz, 2023; Kayaoğlu, 1996; Vurgun, 2022). This regulation and particularly the Regulation for Writing and Translation dated 14 May 1870, played a pivotal role in the expansion of modern textbooks and the translations from European languages (Nurdoğan, 2014, p. 85; Somel, 2010, p. 238).

This last regulation firstly focussed on the books to be written or translated. These books were categorised into three distinct groups, each subject to important provisions. The first group comprised books presented for competition. The provisions pertaining to these books revealed a planned schedule for their execution, with categorisation and prizes determined based on their respective merits. It was also evident that efforts were made to prevent discouragement and nurture writing enthusiasm of authors whose books didn't attain any prize. Anonymity was a very important rule in the competition. This rule was undoubtedly noteworthy in terms of conducting the competition in an objective manner and making decisions on textbooks in this way. According to Kayaoğlu (1996, p. 72), this rule aimed to "uphold the principle of equality among participants and ensure fair treatment for all individuals." Furthermore, the relevant provisions outlined the examination process and delineated additional procedures to be executed following the timely submission of the books.

The second group encompassed books that were not specifically commissioned but were instead offered from external sources. The provisions governing these books provided insights into their categorisation and the determination of prizes for each of them. In addition to giving a certain number of complimentary copies of these books to the Ministry of Education, it was decided that they would also be placed in various libraries. It can be said that this decision served a dual purpose: making these books available to the public and enhancing the visibility of the authors.

The third group encompassed books subject to writing or translation for a prespecified price. The provisions pertaining to these books elucidated that the writing or translation processes would be formalised through contractual agreements between the parties involved. It was also evident from these provisions that authors or translators were strongly encouraged to adhere to deadlines, and protocols were outlined in case of any lapses. According to the relevant provisions, authors and translators possessed no rights over these books other than their names. As Akay (2015, p. 94) emphasised, this arrangement meant that authors and translators were granted moral rights solely in relation to the mentioned books.

Furthermore, as also outlined in the preamble of the regulation, in addition to a substantial monetary prize designated for each eligible book, authors could potentially generate a financial gain from the sale of their books for use in schools since they were legally entitled to copyright protection. Within this framework, the Regulation for Writing and Translation played a pivotal role in maintaining the progression of copyright protection and comprehension within the Ottoman Empire (Başar, 2021, p. 977; Turan, 2016, p. 223). The regulation delved into various aspects, including the specifications for inscriptions on the books and the procedures for rewarding authors. Notably, it also mandated that authors whose books were rejected would receive explanations for the decision. This provision was evidently designed to afford authors the opportunity to revise and enhance their books.

The final section of the regulation pertained to the declaration of the 11 textbooks to be put into the competition for sıbyan schools. This declaration outlined the number of page, prize amount, and writing duration for each textbook. While some of these specifications were identical for certain textbooks, others varied. In terms of content, these textbooks were planned to cover significant topics. It was clear that some of these topics were challenging for children who were at the beginning of their educational life. Notably, the topics planned to be covered by the textbooks such as *Alphabet*, *Turkish Grammar*, *Composition*, *Poetical Literature*, *Orthographical Exceptions*, and *Calligraphy* were particularly noteworthy in this regard. Nonetheless, authors were provided with various guidelines aimed at overcoming difficulties and facilitating learning in these topics.

The primary guidelines were as follows: to emphasise easy-to-spell words and gradually progress to more challenging ones in both words and phrases, use words that children are familiar with in their everyday language, ensuring that their meanings align with the children's level of comprehension, enhance the textbook's content and appeal by incorporating suitable illustrations, include numerous examples to illustrate concepts, favoring a balance between the complexity of rules and examples, steer clear of intricate language rules and convoluted topics that may be challenging for children, and opt for concise stories/texts and teaching methods that simplify the learning process.

The "desired" content of these textbooks provided valuable insights into the understanding of political culture of the ruling elites in the Tanzimat Period and the ideal individual they targeted (Alkan, 2005, p. 108). It can be said that with the content of the textbooks such as *Alphabet*, *Turkish Grammar*, *Composition*, *Poetical Literature*, *Orthographical Exceptions* and *Calligraphy* were aimed to raise individuals who could read and write, have a grasp of grammar, conduct private or official correspondence and understand poetry. On the other hand, the content designed for textbooks including *Morality*, *Practical Virtues*, *Geography*, *Ottoman History* and *Useful Knowledge* indicated that the targeted individuals were also expected to exhibit moral character, fulfill their duties, exhibit an awareness of the Ottoman collective identity, and embody practical virtues that would fortify this identity, have knowledge about the world in a broad sense, possess an understanding of both Ottoman and non-Ottoman geography from various perspectives, have familiarity with Ottoman history, demonstrate patriotism, and command a wide array of knowledge in various disciplines.

As understood from the Official Gazette of the Ottoman Empire, *Takvim-i Vekâyi*, the writing and translation of these textbooks generated significant interest nationwide. In fact, the Department of Science, upon learning that such textbooks were being submitted from distant regions of the Empire, chose to extend the initially established deadline (Kısm-ı Gayr-i Resmî: Mevâdd-ı Dâhiliyye, 1287, p. 2). According to Berker (1945, p. 84), this competition represented a pioneering effort to systematically create essential textbooks for sıbyan schools, marking a commendable advancement given the time period.

However, concrete information regarding the competition's outcomes remains scarce. Only limited data were obtained from the sources. As is understood from available data, following 1870, some of these textbooks or comparable ones were published and distributed to schools. Berker (1945, pp. 84-85), initially noted that he had found no records in the archives confirming the completion of the competition, which began in 1870, and the production of the textbooks mentioned above. Nevertheless, he added that two archival documents from 1875, which he later presented, shed some light on the subject. The first of these documents noted that some textbooks written by Selim Sabit Efendi, one of the leading educators of the Tanzimat Period, had been licensed. The second document stated that some textbooks had been sent to the students of the sıbyan school established for Circassian Muhajirs in the village of Ali Paşa in Silivri. Some of the textbooks referenced in these documents were either identical or closely resembled those listed in the original declaration, both in terms of nature and titles.

The details given by Bilim (2002, pp. 205-207) about the content of the textbooks prepared especially by Selim Sabit Efendi support this situation. Moreover, Alkan (2005, pp. 105, 108), contends that the winning textbooks were indeed published and distributed to certain schools. A bibliography compiled by Öztürk (1998, pp. 33-39) also reveals the existence of textbooks that bear resemblance to some of those listed in the original declaration. However, as highlighted by Somel (2010, p. 238), it should be noted that traditional texts persisted to be used alongside modern textbooks until the late 1870s.

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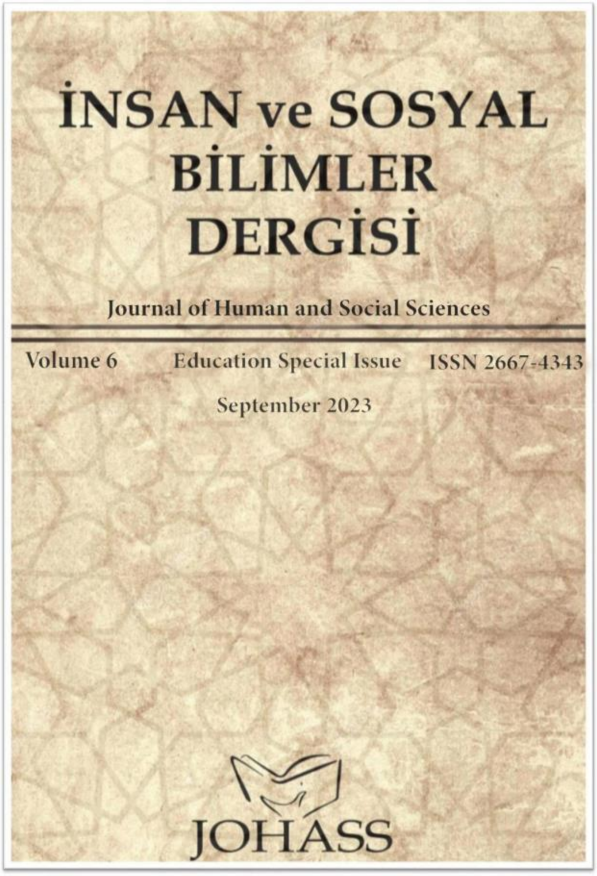

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A Review on the Working Conditions and Occupational Health and Safety Issues of International Students in Turkey

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A Review on the Working Conditions and Occupational Health and Safety Issues of International Students in Turkey

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Abstract **Research Article**

The increasing presence of international students in higher education in Turkey has brought their working conditions and issues related to occupational health and safety into sharper focus. Türkiye's educational and cultural richness attracts an international student body. Some of these students work during their education to meet their economic needs. For the methodology of the research, document analysis from qualitative research methods was employed. Primary data sources for the research include legislation related to Occupational Health and Safety (OHS) intersecting with international students in higher education in Turkey, academic articles, books, and reports. The obtained data were classified according to the aim of the research and discussed under respective headings. According to the results of the study; international students face challenges due to language barriers, cultural adaptation issues, and lack of knowledge about their legal rights. These challenges lead them to low-wage jobs and deprive them of occupational health and safety standards. It is recommended for Turkey to provide occupational health and safety training for international students and organize informative seminars about legal rights and work permits. Participation of employers in awareness programs targeting this group of students will be a significant step in solving these problems.

Keywords: International students, Turkey, working conditions, occupational health, job safety, literature review, cultural adaptation, legal rights

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Introduction

With the influence of the globalization process, significant changes are taking place in education worldwide, especially in higher education, as in many other sectors. One of these changes in higher education is the internationalization of universities. Universities are opening their doors to the world by hosting international students and faculty from different countries. The trend of globalization and change is pushing universities to exert more effort in internationalization, opening their doors to international students, and taking on global responsibilities and competition in this field.

In many countries around the world, universities now host students from different geographies. As the landscape of higher education shifts towards a more global setting, facilitating smooth entry for international students becomes crucial. The international higher education domain, which encompasses short-term and long-term student mobility and joint diploma programs with universities from diverse countries, is poised to burgeon. The surge in the number of international students — from about 800,000 in the 1970s to a projected 8 million by 2024, underscores this trend (UNESCO, 2022; Akpınar & Küçükgöksel, 2022).

Turkey's participation in this global student movement began with the initiation of the Foreign Student Exam (FSE) in 1981. From a modest 5,378 international students in 1983, the numbers grew steadily, culminating in 55,000 by 2014, supported by various scholarships and programs (Yilmaz, 2018). Yet, with Turkey hosting only about 1% of the global international student population, there's room for growth. One primary barrier has been the FSE. Here's why it might need reconsideration (Çatal, 2021):

Advantages of Abolishing the FSE:

1. **Ease of Access:** Removal of the exam would streamline the admission process for international students, making Turkish universities more appealing.
2. **Competitive Edge:** As countries vie to attract international talent, removing entry barriers can provide Turkey with a competitive advantage.
3. **Diverse Student Body:** Easier entry might lead to a more diverse international student population, enriching the academic and cultural environment.
4. **Economic Benefits:** More international students might result in increased revenue for universities and local economies.

Potential Disadvantages:

1. **Quality Concerns:** Without a standardized exam, universities might find it challenging to assess the academic caliber of incoming students.
2. **Overcrowding:** An influx of students might strain university resources, including housing and academic facilities.
3. **Integration Issues:** A sudden surge in international students might lead to integration challenges, both academically and socially.

In conclusion, while Turkey has made strides in the international education sector, the abolition of the FSE could be a pivotal decision. To truly harness the benefits and navigate potential pitfalls, it's imperative to accompany such a move with supportive infrastructure, resources, and a long-term vision for internationalization. The higher education system in Turkey has shown promise in its rapid internationalization, and with the right moves, it can indeed position itself as a global education hub.

In recent years, Turkey has witnessed a growing trend in internationalization in higher education. One of the most important indicators of this trend is foreign students coming to Turkey for short and long-term undergraduate and graduate education (Yilmaz, 2018). Foreign students studying in Turkey are generally defined as "non-Turkish citizens who are in Turkey to receive education at any degree or branch level or to participate in Turkish courses" (European Union and Directorate General of Foreign Relations, 2023). As previously highlighted, Turkey has witnessed a significant surge in its higher education student population. Data from CoHE underscores this growth, indicating that international student figures stood at 108,076, 125,138, and 154,505 across the academic years from 2016 to 2019. This uptick in the migrant student demographic underscores an emerging need for comprehensive studies on the subject, given the paucity of research addressing the challenges faced by this group, especially outside the major cities in Turkey. Gaining insights into the obstacles these students confront is pivotal for university staff and administrators, equipping them to extend targeted assistance. By tailoring support to meet the unique needs of migrant students as they navigate the Turkish academic system, we can pave the way for them to seamlessly integrate into their courses and ultimately attain their educational aspirations (Yilmazel & Atay, 2023). However, it is important to note that this rapidly increasing number of international students brings various problems, especially for students unfamiliar with Turkey's geography, culture, language, and education system.

Generally, the most common problems encountered by international students in different countries and in Turkey are: adaptation problems and the accompanying stress (Güvendir, 2016); low academic achievement due to inadequate Turkish language skills and financial difficulties (Kılıçlar, Sarı, & Seçilmiş, 2012); psychological problems such as maladjustment, loneliness, shyness, and cultural shock (Kıroğlu, Kesten, & Elma, 2010); economic problems, health problems, housing difficulties, transportation difficulties, and homesickness (Kıroğlu et al., 2010).

The burgeoning influx of international students into Turkish higher education institutions has necessitated a sharper focus on their employment conditions and associated OHS concerns. This study endeavors to scrutinize the work environments and OHS challenges encountered by international students in Turkey and subsequently offers actionable solutions to mitigate these issues. While Turkey's rich educational and cultural tapestry lures students from across the globe, the economic imperatives compel a segment of this cohort to seek employment during their academic tenure. Consequently, their employment conditions and the encompassing OHS parameters assume significance, straddling the realms of both education and human rights. The essence of this research hinges on highlighting the occupational challenges besetting international students in Turkey. Moreover, there's a need to shed light on pertinent questions: Are these students working under formalized permissions, or are there instances of unauthorized employment? In unfortunate scenarios of workplace accidents, what are the repercussions for both the employer and the student? Addressing these questions, this study proposes a roadmap to ensure these students experience safer, more equitable, and health-conscious working environments.

Method

Model

This study was conducted within the framework of qualitative research methods, using the document review method. Document review is a qualitative research method carried out through the analysis of written materials (Yıldırım & Şimşek, 2018). This method is particularly effective in obtaining new perspectives and interpretations through an in-depth analysis of existing literature, previous studies, reports, written documents, and other materials (Creswell, 2019).

Study Document

In this research, regulations, academic articles, books, and reports regarding OHS at the intersection of international students in higher education in Turkey have been used as the primary data sources. Within this research, an array of sources was consulted to examine OHS in relation to international students in Turkey's higher education context. Specifically, the studies by Çelik (2008), Musaoğlu (2016), and Sargeant & Tucker (2009a; 2009b) were highlighted due to their profound relevance and insights on the subject. It remains pertinent to delineate the explicit relationship of these studies to the overarching topic. Furthermore, it is essential to determine whether our assessment was exclusively grounded on these three works or if they were part of a more extensive literature review.

Data Collection

During the document review process, the relevant literature was systematically scanned, and significant documents related to the OHS at the intersection of international students in higher education in Turkey. In this process, the study in which Sargeant & Tucker (2009a; 2009b) defined the concept of immigrant workers and the study in which Musaoğlu (2016) examined the concept of internationalization in higher education were especially scrutinized among many other sources.

Compliance with Ethical Standard

The documentation review, planned to be work conditions and occupational health and safety isssues of international students was ethically approved by the decision of Istinye University Social and Humanities Research Ethics Committee dated 20.07.2023 and numbered 2023/07. (İstinye University, 20 July 2023, No: 2023/07).

Findings

International Students in Higher Education and New Developments

Internationalization is generally defined as the "expansion of institutions' activities beyond national borders." This concept has become a significant factor in higher education today, and the impacts of globalization on higher education are diverse. Inter-institutional relations are increasing, and universities are taking significant steps towards internationalization (Zerengök, 2016). Maringe and Foskett emphasize that the concept of a university embodies the idea of "universal" and note the rapid progress many institutions are making towards internationalization due to globalization. In Turkey, internationalization in higher education is emphasized as a concept that should be felt at every stage of instruction (Musaoğlu, 2016; Moshtari & Safarpour, 2023).

Internationalization covers a broad spectrum in universities, from curricula to diploma recognition (Knight, 2018). According to Erdoğan (2014), the idea of internationalization encompasses the universities' curricula, diploma validity, and the profiles of students and faculty.

Relevant literature argues that the missions of an international university should be based on six dimensions: "internationalized higher education, intercultural competence, integration with universality, interdisciplinary programs, civil participation, and comprehensive excellence." Internationalized higher education includes not just international students but also academic and administrative staff from various countries. Intercultural competence relates to language and interpersonal communication. Integration with universality promotes tolerance among students. Interdisciplinary programs ensure that students are more successful in the global market. It is also recommended that cultural and social activities be organized to help international students adapt to their environment. Lastly, comprehensive excellence involves practices across various fields to achieve the best outcomes (Musaoğlu, 2016). Qiang (2003) outlines two primary reasons affecting the internationalization of higher education. Firstly, international students contribute positively to the national economic interests by increasing institutional income. Secondly, he mentions the onset of an era where technological advancements have made education international, reducing the influence of national borders and policies (Musaoğlu, 2016, pp. 7-8).

Internationalization in education denotes adding an international and cultural dimension to a university's activities. This process aids students in transferring different cultures and experiences to a new environment. This interaction fosters tolerance within the university environment and can decrease prejudices between nations. Thus, international students are considered a crucial component for the internationalization of education (Zerengök, 2016). The concept of internationalization is multifaceted, aiming for professional development in various fields. Therefore, different authors approach the topic from different angles and contribute accordingly. Internationalization holds significant importance for national education, and a university progressing towards internationalization in its country offers broader opportunities to its students. Efforts towards internationalization continue in Turkey (Çetinsaya, 2014).

With the process of globalization, the network of relationships between higher education institutions intensifies, and universities acquire a more international character. Students, academicians, and various social groups included, the internationalization of higher education emerges as one of the main drivers of today's social, cultural, and economic movements. In higher education, borders are disappearing, and there's an uptick in international academic collaborations. Turkey is making its mark in these developments. The international dimension of the higher education system stands out amidst these significant developments. The situation of the Turkish higher education system concerning international students, viewed as one of the factors of internationalization in higher education, is the primary subject of study (Aslan & Güneş, 2016).

The internationalization of Turkish higher education has materialized in various ways, most notably through the long and short-axis mobility of international students and faculty. Other developments include sending students abroad; aligning the Turkish higher education sector with the Bologna Process; opening universities abroad and establishing joint universities with other countries within Turkey; initiating different exchange programs, among others. The study primarily focuses on the influx of international students to Turkey (Aslan & Güneş, 2016; Ghanbary, 2017).

In many countries, international education is addressed as a critical issue because it serves several crucial purposes: acquiring qualified individuals from different countries, enhancing competition by meeting the human resource needs of the economy with their culture and values, producing and sharing useful information, and fostering intercultural and inter-country understanding and tolerance in the rising fields of security and diplomacy. International education provides opportunities for establishing international connections. Turkey's primary expectation in the pursuit of becoming a regional and global power is expressed as "creating a ready human resource abroad." Secondly, there's an opportunity to support Turkish academia with students from abroad. The expectation from higher education to strengthen these relations is quite high (Güneş, 2016, pp. 73).

In a short time, the number of international students in Turkey, which jumped from tens of thousands to over 40,000, is projected to rise to hundreds of thousands soon. The achievements recorded in this process are attributed to the promotions of Turkish universities and higher education abroad, some changes in higher education such as the increase in

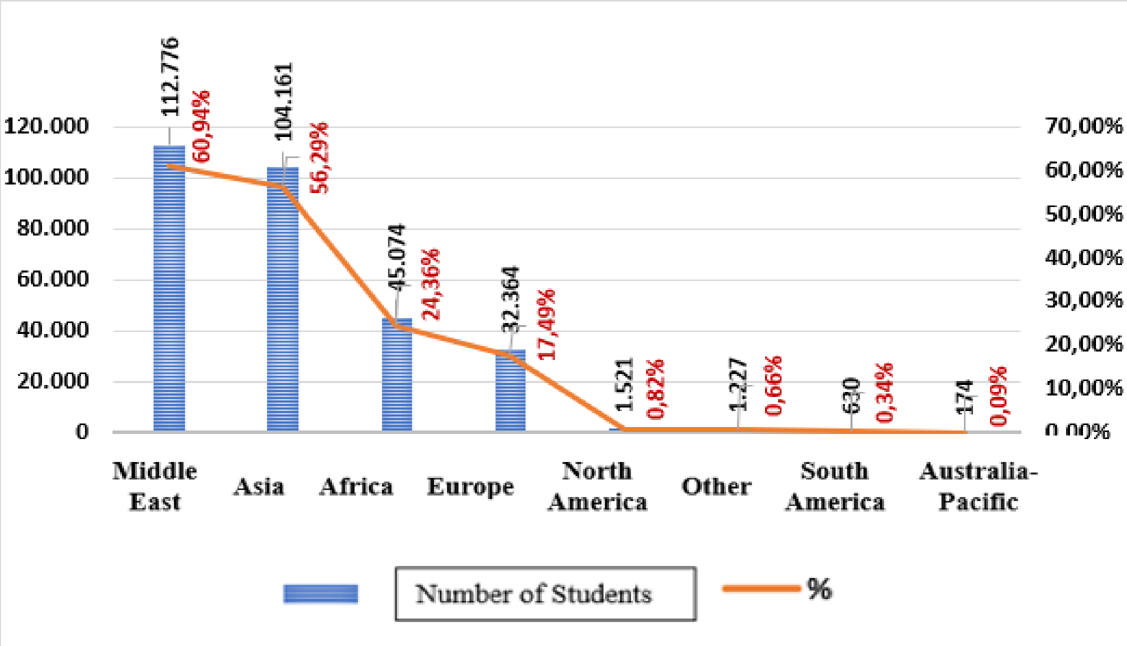
English-taught departments and institutions, boosting international faculty numbers, encouragement in establishing international student offices in universities, certain developments related to Turkey's foreign policy, and the increase in protocols signed with various governments (Güneş, 2016, pp. 74).

In Turkey, there are many universities both in the public and private sectors offering courses in various fields. The International Student Office, under the Council of Higher Education, performs extensive tasks to ensure the efficient management of international students and provide them with quality services. They have established a structure that supports international students in terms of their registration, accommodations, scholarship opportunities, social and cultural adaptation, and language education. The universities have created environments that are conducive for international students, leading to an increase in their numbers. The student quota for various courses is determined by the Board of Higher Education, which is also responsible for guiding international students in Turkey (Güneş, 2016, PP. 75).

In this research, there is a focus on evaluating the current situation of international students in Turkey and their experiences, given the historical context. These evaluations aim to offer suggestions and solutions to potential problems faced by the international students, improve the quality of the services they receive, and enhance the positive contributions they make to the Turkish higher education system and society. By comprehending the international student profile, it will be possible to develop strategies to address challenges and devise policies that promote the integration of these students (Güneş, 2016, pp. 76).

Figure 1

Number and Percentages of Students Studying in Turkish Universities in the 2022-2023 Academic Year by Continent (European Union and Directorate General of Foreign Relations, 2023)



According to Figure 1, which depicts the "Number and Percentages of Students Studying in Turkish Universities for the 2022-2023 Academic Year by Continent," the most substantial representations are from the Middle East at 60.94%, Asia at 56.29%, and Africa at 24.36%. In contrast, the Australia Pacific region has the lowest representation, accounting for just 0.09%. The data underscores a pronounced trend of students from the Middle East and Asia choosing to pursue their studies in Turkish universities. Together, these regions dominate the international student demographic in Turkey. The significant percentage from Africa also points to Turkey's growing appeal as a study destination for African students. Conversely, the negligible representation from the Australia Pacific region suggests either limited interest or fewer opportunities for students from this region to study in Turkey.

The number of students from the top ten countries studying in Turkish universities in the 2022-2023 academic year is provided in Table 1.

Table 1

Number of Students from the Top Ten Countries Studying in Turkish Universities in the 2022-2023 Academic Year by Country (European Union and Directorate General of Foreign Relations, 2023)

	Number of Students by Department												Total Number of Students		
	Associate's Degree			Bachelor's Degree			Master's Degree			Doctorate					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total	15485	8751	24236	74097	39999	1000005	14204	6347	20551	4053	1953	6006	1000005	57050	164889
Syria	8773	4511	13284	22241	13295	35536	2682	1001	3683	479	148	627	34175	18955	53130
Azerbaijan	1111	435	1546	15265	5247	20512	2412	1351	3763	423	325	748	19211	7358	26569
Turkmenistan	2330	1872	4202	9848	7480	17328	531	276	807	44	33	77	12753	9661	22414
Iraq	443	333	776	3771	2172	5943	4221	1467	5688	1102	331	1433	9537	4303	13840
İran	362	382	744	3480	3661	7141	948	1016	1964	1206	911	2117	5996	5970	11966
Afghanistan	410	184	594	5146	1402	6548	1721	300	2021	377	33	410	7654	1919	9573
Somalia	989	394	1383	4890	1967	6857	791	353	1144	106	11	117	6776	2725	9501
Germany	287	485	772	1822	2520	4342	131	284	415	40	69	109	2280	3358	5638
Yemen	552	78	630	4144	836	4980	431	114	545	172	41	213	5299	1069	6368
Egypt	228	77	305	3490	1419	4909	336	185	521	104	51	155	4158	1732	5890

Table 1 systematically presents the distribution of foreign students studying in Turkish universities during the 2022-2023 academic year by country, education level, and gender. The key findings are as follows:

- The total number of Syrian students (53,130) dominates this list, likely due to Turkey's geographical and historical connections with this country, and as a consequence of recent political and social issues in Syria. This may indicate the damage the civil war in Syria has inflicted upon its educational infrastructure and the tendency of the young population in the country to seek alternative locations to meet their educational needs.
- The high number of students from Turkic-speaking countries such as Azerbaijan (26,569) and Turkmenistan (22,414) could reflect cultural and historical ties between these countries and Turkey, as well as educational collaborations and agreements.

- Gender distribution is generally in favor of males; however, in some countries, like Iran, we observe an almost equal distribution at the doctoral level. This may reflect variances in gender norms, educational opportunities, and access in different countriesThere's a peak in student numbers at the undergraduate level, indicating that the bachelor's degree may be a more popular choice for international mobility than master's or doctoral degrees.
- Graduate and doctoral programs have a notable student participation, especially from certain countries. This could suggest that Turkey might be perceived as an international hub for certain academic disciplines or research fields.

This data provides a foundation for analyzing the international position and strategic importance of Turkey in the higher education sector. More in-depth analyses can be made when the effects of inter-country educational policies, collaborations, and scholarship opportunities on these distributions are examined in detail.

The increase in the number of international students in Turkish universities has been supported by the establishment of foundation universities and by previous immigration policies aimed at international students. International students are at a higher occupational injury risk compared to their local peers (McCauley, 2005). This vulnerability arises from factors such as language and cultural barriers, limited employment opportunities, relatively challenging working conditions, and frequently encountered financial pressures (Scott et al., 2004; Thamrin et al., 2010; Ahonen et al., 2007).

A number of studies in developed countries address workplace vulnerability of students and international student workers (Hawthorne, 2005; Thamrin et al., 2010; Hansen and Donohoe, 2003). Looking at worker's compensation statistics, a profile can be formed on young workers' injury experiences (Smith and Mustard, 2009). However, there is no specific occupational code for international students, and underreporting to young workers, especially for women, poses a potential problem.

Reasons for international students to work most international students in Turkey are employed in workplaces. Results from the related literature suggest that the main reasons for international students to work are to earn money, cover living expenses, and elevate their standard of living (Kondakci et al., 2023; Yilmazel & Atay, 2023). However, some students have expressed a desire to gain work experience to improve their Turkish and understand Turkish culture. This finding is consistent with Manthei and Gilmore (2005), who argue that having a job does not have detrimental effects, especially if students manage their working hours to fit their academic loads. Similar findings have been reported by McInnis et al. (2002), and Pascarella et al. (1998) have suggested that moderate work can actually enhance students' academic success and learning process, and improve their employability and organizational skills. Therefore, instead of deciding whether international students should work or not, it is essential to advise international students and University administrators on how many hours of paid employment students can manage successfully alongside their academic loads.

Occupational Health and Safety for Migrant Workers

The term 'migrant worker' is widely discussed in relevant literature, and one of the definitions, as provided by Sargeant and Tucker (2009a), describes them as "workers who have migrated to another country with the aim of finding employment and currently do not have permanent status in the host country."

The migrant category encompasses both legally admitted workers who have obtained the right to enter and work in a country and those who work without legal authorization. Additionally, it includes Temporary Foreign Workers (TFWs) whose employment rights are initially limited and foreign workers who have obtained longer-term residency rights but have not yet achieved permanent status (Sargeant and Tucker, 2009a, pp.51).

Sargeant and Tucker (2009a)'s definition of 'migrant worker' is useful in explaining the risks and vulnerabilities faced by migrant workers. This definition can be applied for analyzing the risks encountered by migrant workers, as it offers a comprehensive perspective. Both the definition and analysis extend beyond the micro or personal level, as they are explained at a macro or political-economic level. The layers of vulnerability include the following (Sargeant and Tucker, 2009b, pp. 605):

Layer 1 - Factors in the Receiving Country: This encompasses the socio-economic conditions of the receiving country, the sectors in which migrant workers are employed, access to and power of collective representation, access to and power over regulatory protection, social inclusion/exclusion, living in the employer's place of residence, urban/rural location, and the role of unions/civil society groups, such as churches and community organizations.

Layer 2 - Migration Factors: This includes issues related to migration security, legal status in the host country, visa or visa-free status, whether status is tied to an employment contract, and the duration and conditions of the right to stay. The role of recruitment agencies and employers in the recruitment process and the treatment of migrants during migration are also considered.

Layer 3 - Migrant Worker Factors: Factors such as reasons for migration (e.g., socio-economic conditions in their home countries and the need to remit money), the migrant's level of education, language and skill levels, and access to suitable jobs and the possibility of applying for jobs are crucial.

In terms of the scope of the issue, studies have shown that migrant worker employment is widespread, especially in sectors where unregulated, precarious work and the use of undocumented labor are the norm (Bilir, 2001; McLaren et al., 2004a; McDowell & Bhachu, 2008; European Commission, 2007; International Labour Organization [ILO], 2004; World Health Organization [WHO], 2007; Akyıldız, Çelik, & Bulut, 2020).

Migrant workers often face greater job insecurity compared to standard employees because they are required to work longer and less socially desirable hours. This leaves them more vulnerable to occupational hazards (Loh & Richardson, 2004; Quinlan et al., 2010). These vulnerable workers are more likely to experience job insecurity and have fewer rights compared to more secure workers (Quinlan & Mayhew, 2001; Tucker, 2002; McLaren et al., 2004b; Nossar et al., 2004; Siddiqui, 2006; Schenker, 2008; Coldring et al., 2009; Sargeant and Tucker, 2009). Research shows that migrant workers are often exposed to hazardous conditions, leading to higher rates of workplace accidents and illnesses compared to standard employees, and they tend to have a higher likelihood of accidents and illnesses compared to standard employees (McKay et al., 2006). For example, in the United States (US), between 1996 and 2000, while the employment rate for migrant workers increased by 22%, the rate of fatal occupational injuries for this population increased by 43%, while the total number of fatal occupational injuries in the US decreased by 5% during the same period (Loh & Richardson, 2004, pp. 42).

After losing much of the economic and social security they had in their home countries, migrant workers often find themselves economically and socially marginalized in their new countries. This means that many migrants are largely "invisible" at many societal levels and are overlooked in government health statistics (Schenker, 2008). Reports by Abrahams et al. (2001) indicate that temporary migrant workers are often confronted with widespread exclusion from the so-called "primary" labor market and instead concentrate in the "secondary" labor market, which mostly consists of low-paid minorities. This results in these groups being disadvantaged in various dimensions, including income, wealth, social mobility, housing, education, and social participation (Cheung, 2006; Siddiqui, 2006; Çetindağ, 2010).

Legislation Related to Occupational Health and Safety

The legislation related to occupational health and safety includes the following:

1. ***Convention No. 155 on Occupational Safety and Health and the Working Environment***

This international treaty, adopted on June 3, 1981, during the General Conference of the International Labour Organization (ILO) in Geneva, aims to establish a national policy on occupational safety and health. It became effective in Turkey on April 22, 2005. Convention No. 155 is a comprehensive agreement covering all workers and addressing various aspects of working life, including working conditions, occupational accidents, and occupational diseases.

2. ***Convention No. 161 on Occupational Health Services***

Also known as the Occupational Health Services Convention, this agreement was adopted by the ILO on June 7, 1985, and it entered into force in Turkey on April 22, 2005. The goal of this convention, established during the General Conference of the ILO in Geneva in 1985, is to protect workers from illnesses and injuries. It recommends measures for providing suitable physical and mental health conditions, creating a safe and healthy working environment, and adapting work to the physical and mental health of workers.

3. ***Framework Convention on Improving Occupational Safety and Health (No. 187)***

Adopted during the General Conference of the International Labour Organization (ILO) in Geneva on May 31, 2006, this framework convention entered into force in Turkey on January 16, 2014. Convention No. 187 emphasizes the globalization of occupational accidents, occupational diseases, and related fatalities and calls for measures to reduce them. It aims to ensure the protection of the life and health of workers in all professions.

Occupational Health and Safety Law No. 6331

Adopted in 2012, Law No. 6331 aims to regulate all responsibilities, rights, and obligations related to occupational health and safety, from employers to employees, with the goal of ensuring occupational health and safety and improving existing conditions. It introduced significant changes, such as the obligation to conduct risk analysis and assessment, the requirement for all workplaces to employ occupational physicians and workplace safety specialists, and higher administrative fines for violations.

Occupational Health and Safety for Migrant Workers

According to the International Organization for Migration (IOM), there are approximately 272 million international migrants, with 52% being male and 48% female. About 74% of all international migrants fall within the working age group of 20-64. Out of the total international migrants, approximately two-thirds (164 million) consist of migrant workers (IOM, 2019). The International Labour Organization (ILO) reports that migrant workers are geographically concentrated, with 60.8% of all migrant workers in just three regions: North America (23.0%), North, South, and Western Europe (23.9%), and the Arab States (13.9%). Other regions hosting migrant workers (above 5%) include Eastern Europe, Sub-Saharan Africa, Southeast Asia and the Pacific, and Central and Western Asia. North Africa has the lowest number of migrant workers (less than 1%) (IOM, 2018).

Migrant workers often face some of the worst working conditions. There are persistent problematic areas in standardized working conditions, both locally and globally. However, compared to past rates, there is an increasing flow of migrants, leading to an increase in the number of individuals experiencing violations of their rights and negative working conditions.

Rights of International Students to Work in Turkiye

International students have the right to work in the countries where they receive their education. This right is typically around 20-24 hours per week, with some variations. By law, they have access to OHS services and training. In Turkey, international students enrolled in master's or doctoral programs can work as researchers in scientific projects related to their studies to finance their postgraduate studies. Some private universities accept fully funded postgraduate students and, in return, may require these students to assist in academic tasks. Undergraduate students usually have the opportunity to work part-time depending on their academic schedule. In developed countries with popular universities, the procedures and conditions for international students to work are favorable. Therefore, rather than determining whether international students will work, it is advisable to emphasize the importance of studying how many hours of paid employment international students can successfully undertake alongside their academic workload.

Study Rights of International Students in Other Countries

International students have the right to work in the countries where they are pursuing their education. This right is typically defined with some variations, allowing approximately 20-24 hours per week. By law, they also have access to occupational health and safety services and training. In Turkey, international students enrolled in master's or doctoral programs can work as researchers on scientific projects to finance their postgraduate studies. Some private universities admit fully funded graduate students and may require them to work as teaching assistants in exchange for their scholarships. Undergraduate students often have the opportunity to work part-time in jobs related to their academic programs.

In developed countries with popular universities, the procedures and conditions for international students to work are generally in favor of the students. Examples include:

- US: Students with F1 student visas (a type of visa issued in the United States for international students to participate in academic programs and English language training programs) can work on-campus during their first year and off-campus during their second year. There are no restrictions on the number of hours they can work.
- United Kingdom (UK): European Union [EU]/ European Economic Area [EEA] students can work without restrictions in the UK. Non-European Union country (Non-EU) students can work with a Tier 4 student visa, up to 20 hours per week during term and full-time during university holidays.
- China: Students with a Chinese student visa can work with permission from immigration authorities.
- Canada: Students can work off-campus for up to 20 hours per week.
- Australia: Student visa holders can work without restrictions during university holidays and up to 40 hours every two weeks during term.
- France: International students with a French student visa have the right to work approximately 964 hours per year, equivalent to around 18.5 hours per week.

- Russia: Student visa holders can work up to 20 hours per week, provided their employment contract ends at the same time as their educational program.
- Germany: Non-EU students with a valid German student visa can work up to 120 full days or 240 half days per year. EU students are typically allowed to work up to 20 hours per week.
- New Zealand: Student visa holders can work up to 20 hours per week, with no restrictions during holidays.
- Japan: Student visa holders need to apply for a separate work permit, and the types of jobs available are limited.
- Spain: Non-EU student visa holders can work up to 20 hours per week, while EU, EEA, and Swiss students face no employment restrictions.

In some countries such as Costa Rica, Cyprus, Fiji, Lebanon, and India, international students are not granted work permits, and the conditions are made very difficult, which goes against the Universal Declaration of Human Rights (Studee, 2023).

Are International Students Young Workers?

The United Nations (UN) defines individuals aged 15-24 who are engaged in work as young workers. International students fall within this definition. These students work during their free time, and their vocational internship programs also fall within this category. Ensuring the safety of young workers today is considered an investment in the safety of future generations, so including international students in this category is a valid assessment. The health and safety practices for young workers should be at the center of efforts to secure their safety and health in the workplace (ILO, 2018).

When making a general assessment, the following observations can be made regarding international student workers:

- They tend to be concentrated in sectors such as hotels, restaurants, wholesale and retail trade.
- Their likelihood of employment under non-standard contract arrangements such as part-time or temporary contracts is higher.
- Their lack of experience and maturity in their jobs can expose them to risks related to overestimating their physical capabilities or underestimating safety and health risks associated with their work.

- Another concern is that working in adverse conditions for an extended period may contribute to immunity issues, which can later lead to other illnesses. However, this factor is not often addressed in occupational health and safety monitoring (Belin et al., 2011).

Risk Factors for International Students

They face both internal risk factors reflecting their lack of experience and external risk factors related to the sectors they often work in. Risk factors for young workers can be listed as follows:

- Being less aware of risks
- Having less experience and qualifications
- Lack of experience in prevention due to the development of occupational diseases over time
- Working in high-risk industries (usually more common among males)
- Psychosocial risks, including those related to gender
- Employment contracts (temporary, part-time, contract work, etc.)

Efforts to improve OSH factors for international student workers vary by country and sector. However, some common elements include:

- Employers have the responsibility to provide a safe and healthy workplace and provide health and safety training before employment (European Agency for Safety and Health at Work [EASHW], 2020).
- They have the right to receive safety and health training in a language they understand, ask questions when they don't understand instructions, report unsafe conditions to their supervisor, and seek solutions.
- They should be given suitable tasks and provided with adequate supervision and guidance.
- They should be involved in safety matters and encouraged to develop a strong safety culture (International Labour Organization [ILO], 2018).

In Turkey, practices related to international students entering the labor market are regulated as follows:

International students who come to Turkey for education purposes need to obtain a work permit to work in any job while continuing their education. Regulations regarding the residence permits, residence permit requirements, and working rights of international students have been made in Law No. 6458 on Foreigners and International Protection, which was passed in the Turkish Grand National Assembly on April 4, 2013.

Discussion and Results

Migrant workers who have lost a significant portion of their economic and social safety nets in their home countries are often trapped between economic and social gaps in their new countries, leading to their marginalization. This situation implies that many migrants are largely 'invisible' across various levels of society, often going unnoticed in government health statistics (Schenker, 2008). Reports by Abrahams et al. (2001) state that temporary migrant workers are frequently excluded from the "primary" labor market and are instead directed toward the "secondary" labor market, which often consists of low-wage minorities. This leads to disadvantages for this group in terms of income, wealth, social mobility, housing, education, participation in social life, and various other dimensions (Cheung, 2006; Siddiqui, 2006). Castells (2000: 376) accurately notes that the boundary between social exclusion and survival in everyday life is becoming increasingly blurred, a phenomenon applicable to an increasing number of people, including migrants. Temporary workers in employment share many labor characteristics with migrant workers, resulting in both short-term and long-term health and safety consequences (Ahonen, Benavides, & Benach, 2007).

Another topic in this research is cultural diversity, which is complex and loaded with value. The examination of cultural diversity is often sidelined in OHS discussions concerning migrant workers, with the focus often redirected toward other OHS explanations such as individual behavior or communication deficiencies. However, research examining the impact of different cultural characteristics on OHS outcomes, such as communication styles, is complex. On one hand, there is evidence that differences in attitudes, perceptions, and beliefs related to safety may emerge among individuals at the intersection of migrant and non-migrant backgrounds (Fiske, 2002). On the other hand, an examination of the published literature on this subject by Mearns & Yule (2009) concluded that there were no consistent predictors for risk-taking behavior and safety performance in a cross-cultural context. Considering the study by Spangenberg et al. (2003) which Mearns & Yule (2009) took into account, they noted that the opportunity presented unique data where workers of the same (albeit different) national backgrounds performed the same tasks in the same project over the same period of time. They also pointed out that fundamental national values were not measured in this study, but data from cultural dimension research by Hofstede et al. (2010) indicated that Norway and Sweden shared similar dimensions in terms of power distance, masculinity, and individualism, yet safety performance between the two national groups differed significantly. Spangenberg et al. (2003) attributed this to differences in planning and education levels between the two countries and variations in compensation systems, revealing the interaction between national and institutional environmental/cultural factors (Mearns & Yule, 2009; Liu-Farrer, 2009). Therefore, comparing OHS differences between different cultures is a complex task.

Despite the increasing interest in this research topic, the extent of work-related injuries and illnesses among the migrant worker population remains largely missing in the discourse on globalization, which often focuses on specific political and economic paradigms related to trade and capital flows. Additionally, those working on international health issues frequently fail to look beyond a medical paradigm and consider the larger social, cultural, political, and economic contexts in which health issues are embedded (Coordination of Action Research on AIDS and Mobility [CARAM] Asia, 2007; Siddiqui, 2006). Furthermore, there are specific shortcomings in existing research. Firstly, most studies on this topic are often confined to a limited number of industries, such as textile and clothing production, retail, and call centers, which often have a tradition of exploitation and frequently employ women and/or new migrants on an irregular basis. Secondly, measuring the extent of occupational diseases and injuries among migrant workers is challenging because government databases rarely record the occupational injuries, deaths, and compensation claims of these workers. More research is needed to identify causal factors and establish more robust criteria (Akyıldız, Çelik, & Bulut, 2020). Lastly, there has been very little research on the well-being of migrant workers, especially with regard to the psychological stress of being a foreign worker, which is often both isolated and underexplored. In summary, given the fragmentation of the literature into multiple discourses, an interdisciplinary approach is required to understand the complexity of the subject. Additionally, this project not only seeks to measure the extent of work-related injuries and illnesses among migrant workers but also requires the development of methodological tools to give voice to this vulnerable population and improve health outcomes.

In the context of Turkey's recent internationalization strategy, there has been a significant increase in the acceptance rates of international students. These students are employed in various sectors during their education and face certain challenges related to occupational health and safety. This review examines the working conditions of international students, the occupational health and safety issues they encounter, and academic perspectives on overcoming these issues:

Overlapping Safety Gaps

International students studying in Turkey, when integrated into the labor market, are exposed to various risks due to their status as migrant workers and their young age. The combination of these two factors makes them more vulnerable to workplace accidents and injuries. In the literature, it is noted that the risks faced by young migrant workers are higher in the workplace compared to other employee groups.

Work Experiences of International Students and Exposure to Injuries

The reasons for international students entering the labor market are solely economic. Improving language skills, social integration, and cultural exchange are also among these reasons. However, many of these students work in low-paid and temporary jobs, making them susceptible to economic exploitation. Their exposure to injuries aligns with the typical profile of young workers, with cuts, burns, and sprains being the most common types of injuries.

Occupational Health and Safety Training Practices and the Role of Universities

Universities have a responsibility to not only enrich the educational lives of international students but also ensure their presence in a safe working environment. However, current educational practices often fall short in providing sufficient knowledge and awareness regarding occupational health and safety.

Recommendations

Here are recommendations for addressing the occupational health and safety issues of international students:

Integration of OHS Education in University Curriculum

Universities should integrate occupational health and safety (OHS) education into their curricula, ensuring that international students receive comprehensive training on workplace safety and health. This education should cover the rights and responsibilities of workers, hazard identification, prevention measures, and emergency procedures.

Comprehensive OHS Training by Employers

Employers hiring international students should provide comprehensive OHS training as part of the onboarding process. This training should be tailored to the specific hazards and risks present in their workplace. It should include information on safe work practices, proper use of personal protective equipment (PPE), and reporting procedures for accidents or unsafe conditions.

University-Industry Collaboration

Universities and the business community should collaborate to address OHS issues affecting international students. Joint initiatives and projects can be developed to enhance the safety and well-being of these students in the workplace. This collaboration may involve internship programs, co-op opportunities, or research projects that focus on OHS improvement.

Government Policy Review and Protection

Governments should review and update policies related to working conditions for international students. It is essential to ensure that these policies provide adequate protection for international students in the labor market. This may involve revising regulations, conducting inspections, and enforcing compliance with OHS standards.

By implementing these recommendations, universities, employers, and governments can contribute to creating safer and healthier working conditions for international students, ultimately enhancing their overall educational and work experiences.

Compliance with Ethical Standard

The documentation review, planned to be work conditions and occupational health and safety isssues of international students was ethically approved by the decision of Istinye University Social and Humanities Research Ethics Committee dated 20.07.2023 and numbered 2023/07. (İstinye University, 20 July 2023, No: 2023/07). İstinye University, 20 July 2023, No: 2023/07.

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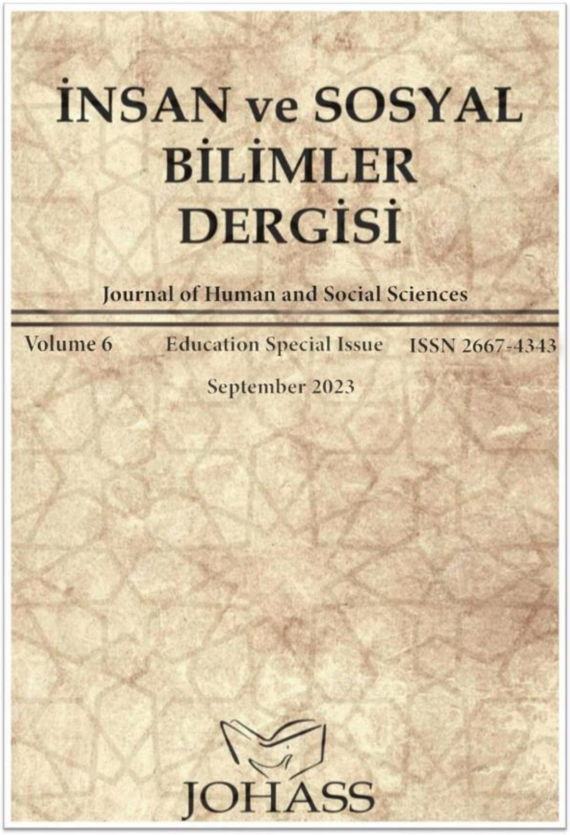

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Depicting the Learning and Teaching Process in Social Studies Classrooms: Middle School Students' Drawings *

** This article is derived from Fatma Özge Bayram's master's thesis entitled "Social studies lesson and learning-teaching process in middle school students' drawings", conducted under the supervision of Döndü Özdemir.*

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Depicting the Learning and Teaching Process in Social Studies Classrooms: Middle School Students' Drawings *

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Abstract

The study aims to determine and examine how secondary school students reflect the social studies lesson learning-teaching process on their drawings. One of the qualitative research methods, the phenomenology, was used. The data were obtained from the drawings of the students and the explanations for these drawings. Maximum variation sampling was used to determine the participants, and 118 students studying in the 5th, 6th, and 7th grades of three secondary schools in the central district of Isparta province participated in the research. The content analysis technique was used to analyse the research data. It has been determined that the students' drawings mostly reflect classroom learning environments, traditional ordering, teacher-centred and expression-oriented methods, and listening-oriented student behaviours. In addition, it was determined that the expectation of a lesson held in the open air, where the students were more fun, games and activities were used, came to the fore.

Keywords: Social studies, the learning-teaching process of social studies, students' drawings.

Article

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Introduction

From the past to the present, the primary purpose of education systems is to raise citizens in accordance with the expectations of society. In this process, especially, the courses within the scope of social studies have assumed a pioneering role in order for individuals to gain knowledge, skills and values that will enable them to participate effectively in society (Banks & Banks, 1999), that is, to become citizens who are suitable for the structure of developing and changing societies, who can take an active role in life and integrate with the world (National Council for the Social Studies [NCSS], 1994). Therefore, it can be said that there is a universal consensus that the main responsibility of the course is to raise effective citizens (Barr et al., 2013; Bining & Bining, 1952; Chapin, 2006; Doğanay, 2002; NCSS, 1994; Öztürk, 2012; Parker, 2001; Sönmez, 1998; Zarillo, 2000). Thus, to create meaningful learning environments for children (Parker, 2001), the social studies course integrates the knowledge gained from social and human sciences, other sciences and current events with an interdisciplinary approach (Barr et al., 2013; NCSS, 1994; Öztürk, 2012). An effective teaching process is vital in realising these critical aims of the course.

For an effective teaching process in the social studies course, it is essential that students perceive and understand it in accordance with its purpose and content and that they can be active in the lesson. In order for the lesson to be effective and efficient, it is crucial that students take an active role and assume their own learning responsibilities, teachers conduct the lesson as a guide, and technological materials and students' own works are used in the lesson (Demirkaya, 2017). In addition, it is necessary to include the problems that students encounter in daily life in the lesson, to teach social issues such as ethics and social rules by establishing a connection with the past and the future, and to develop their creativity by providing interactive environments (NCSS, 1992). In Turkey, especially in the 2005 and later curricula, the necessity of conducting social studies courses with learning and teaching processes in which students are active has been clearly stated. In the current social studies curriculum (Ministry of National Education [MoNE], 2018), it is emphasised that the course should have an interdisciplinary approach, take into account basic principles such as locality, topicality, and reflective inquiry, be equipped with methods and techniques that provide students with social science methodology, frequently compare them with real-life problems, make use of out-of-school environments in teaching, and bring current and controversial issues into the classroom by associating them with problem-solving, critical thinking, using evidence, decision making and research skills. Therefore, making realistic evaluations of the structure and learning-teaching processes of social studies courses in schools is prominent.

There are many studies in the literature that examine social studies courses in schools in Turkey from the perspective of teachers in terms of curriculum (Çelikkaya & Kürümlüoğlu, 2018; Kaymakcı & Ata, 2012; Memişoğlu, 2012; Topçu, 2017), objectives (Özkılıç, 1992), methods and techniques used in the course (Aydemir, 2012; Çelikkaya & Kuş, 2009), social studies education in Turkey in general (Kılınçkaya, 2018) and expectations towards this course (Kuş & Çelikkaya, 2010). On the other hand, there have been studies evaluating social studies course learning-teaching environments and processes based on student views (Ayva, 2010; Çetin & Dinç, 2017; Deveci et al., 2014; Dündar et al., 2016; Erdoğan, 2009; Ocak & Didin, 2018; Sağlam & Güngör, 2016) and determining expectations (Aktepe et al., 2014; Deveci & Gürdoğan Bayır, 2011; Karaman & Akbaba, 2020). In addition, some studies examine the effectiveness of social studies learning-teaching processes through a meta-synthesis study (Yaşar et al., 2015) and determine student perceptions of the course through different data collection tools such as metaphors (Gömleksiz et al., 2012; Güven & Akhan, 2007), emblem and logo designs (Aydemir & Ustaoğlu Çelik, 2023). Student drawings are also one of the ways that can be used to determine perceptions and opinions about the course.

Drawings are of great importance for children to reflect on themselves and express their feelings and thoughts about events. Drawings are also used to recognise children in terms of creating non-verbal language, thus facilitating expression (Yavuzer, 2019). Drawings are a useful and effective tool for gaining significant information in a short time (Miles, 2000). Learning the world of human signification through drawing offers a different perspective compared to the expression made by speaking and writing (Haney et al., 2004). Through drawings, which children see as a game at almost every age, what they cannot express, and what they feel and think can be revealed (Yavuzer, 2019). As can be seen, children's drawings are considered as an effective measurement tool that can be used to evaluate the impact of what they see and experience and to understand their thoughts. Students can convey their perceptions and opinions more sincerely, realistically and comfortably through drawings. Thus, it can be thought that more precise and concrete data can be obtained about the social studies course and the learning-teaching process through the drawings of the students.

In the relevant literature, children's drawings have been used in different studies, such as in terms of the family (Türkkan, 2004; Akgün & Ergül, 2015), the internet (Ersoy & Türkkan, 2009), love (Günindi, 2015), violence (Akbulut & Saban, 2012), war and peace (Aktaş, 2015), sustainable development and national happiness (Ahonen et al., 2018), teacher (Ahi et al., 2016; Arslan Cansever, 2017), environmental problems (Ersoy & Türkkan, 2010; Özdemir Özden & Özden, 2015; Seçgin et al, 2010), museums (Kisovar Ivanda & Batarelo Kokić, 2013), active citizenship (Çevik Kansu & Öksüz, 2015), literacy (Tavşanlı & Kaldırım, 2018), sports and sports brands (Ünal, 2017), school garden (Cronin Jones, 2005; Salı et al., 2014), scientist (Manzoli et al., 2006; Oğuz, 2007), STEM (Benek & Akçay, 2018). In addition, there are studies examining perceptions and opinions about courses such as Turkish (Melanlıoğlu, 2015), English (Yaman, 2018; Xiao & Carless, 2013) and science (Ballıel Ünal, 2017; Şahin Akyüz, 2016) through drawings. On the other hand, some studies (Akman & Ekinci, 2021; Yalçınkaya, 2015) have also been conducted to determine students' perceptions of only social studies courses through drawings. A similar study on the learning-teaching process of the course was not found. Therefore, the study has a unique value in this respect. In addition, it can be said that students can express themselves more easily through drawing, and the deficiencies and problems related to the learning-teaching process can be identified more realistically and concretely. For these reasons, the study aimed to determine how the 5th, 6th and 7th-grade secondary school students reflected the social studies course learning-teaching processes they experienced in schools in their drawings and answers to the following sub-questions were sought:

1. What are the characteristics of social studies courses reflected in students' drawings?
2. Do the characteristics of the students' drawings differ according to the grade level?
3. What are the students' expectations for an effective social studies course?

Method

Model

Phenomenology design was used in the study. Phenomenology is inductive descriptive research that involves obtaining data from people who directly experience a phenomenon, systematically and in-depth investigating how individuals experience the relevant phenomenon and how they make sense of these experiences (Patton, 2014), defining the common meaning of these experiences, and aiming to highlight the perceptions of those who experience the experience from their own perspective (Creswell, 2016; Ersoy, 2016; Merriam, 2013). This study aimed to present a detailed picture of the structure and characteristics of social studies courses from the perspective of students who directly experienced social studies courses in schools.

Participants

The research was conducted with 5th, 6th, and 7th-grade students who attended social studies courses delivered by branch teachers in secondary schools. In this sense, the participants of the study consisted of 118 students studying in three secondary schools in the central district of Isparta province. Maximum variation sampling, one of the purposeful sampling methods, was used to determine the participants. The main purpose of maximum variation sampling is to reflect the diversity of individuals in this sample to the maximum extent by creating a small sample group (Yıldırım & Şimşek, 2016). Considering that it may change the experiences and perceptions of the students, the socio-economic environment where the schools are located was accepted as a diverse area, and three schools were randomly selected at high, medium and low socio-economic levels. One branch was selected from each school, and data were collected from 156 students on a voluntary basis. However, the data obtained from 38 students were excluded from the analysis. As a result, the drawings of 118 students were analysed.

Of the students participating in the study, 65 (55.1%) were girls and 53 (44.9%) were boys. Of the participants, 39 (33.3%) were fifth-grade students, 38 (32.2%) were sixth-grade students, and 41 (34.7%) were seventh-grade students. The report card grades of 2 (1.7%) of the students were between 55-69, 18 (15.3%) between 70-84, and 76 (64.4%) between 85-100. 22 people (18.6%) did not specify their report card grades. Most (49.2%) of the participants' mothers were housewives, while 39 (33.1%) worked as civil servants. The mother of 5 students (4.2%) was self-employed. 3 students (2.5%) did not specify their mother's occupation. The fathers of 37 (31.4%) of the participants were self-employed, 26 (22.0%) were labourers and 52 (44.1%) were civil servants. 3 people (2.5%) did not specify their father's occupation. Finally, 29 (24.6%) of the students who participated in the study were studying in schools with lower socio-economic levels, 40 (33.9%) in schools with middle socio-economic levels and 49 (41.5%) in schools with higher socio-economic levels.

Data Collection

In phenomenological research, in addition to interviews, case studies, root analysis, document analysis and visual analysis methods, data obtained from observation, art, poetry, music and other forms of art (Creswell, 2016) can be used. In this study, using drawings, a form of art, as a data collection tool was preferred because drawings are not only a general indicator of children's development and skills but also useful in terms of giving clues about their way of thinking. Drawings, one of the well-known daily life activities, have an important place in children's expressing themselves in non-verbal and simple language and conveying what they think as they feel (Yavuzer, 2009). In this context, as the main data collection method in the study, students were asked to think about the learning situations and environments of all social studies courses so far and to make a sample drawing reflecting these. They were also instructed to include the teacher, themselves, and their friends in their drawings. The students were given A4-sized papers and six dry colours during the intervention. In addition, students were given a form containing information about their personal characteristics and some open-ended questions to explain their drawings.

In the development of the data collection tool, relevant studies in the literature (e.g. Akerson, 2017; Arslan Cansever, 2017; Ballıel Ünal, 2017; Ersoy & Türkkan, 2009; Melanlıoğlu, 2015; Özdemir Özden & Özden, 2015; Şahin Akyüz, 2016; Yalçın & Erginer, 2014; Yalçınkaya, 2015) were examined and an approach similar to Şahin Akyüz's (2016) research was used in the questions asked. The data collection tool was analysed by two social studies education experts in terms of content and one Turkish education expert in terms of language and expression comprehensibility. In addition, a preliminary test was conducted with 20 students. After the relevant corrections, it was made ready for use. The final form consists of two parts. In the first part, questions about gender, grade, report card grade, and mother and father occupation were included. In the second part, questions, including explanations about the sample learning-teaching environment reflected by the participants regarding social studies lessons, were included. These questions were as follows: "Please mark yourself in your drawing and explain what you did in the social studies lesson in your drawing.", "Please mark your social studies teacher in your drawing. Please explain where and what/what your teacher does in the social studies lesson in your drawing.", "Please explain what/what your friends do in your drawing." and "What do you think is missing in the social studies lesson you drew? How would you learn better and more if social studies lessons were like this? Can you tell us what kind of a social studies lesson you imagine?". Including a section where students' opinions about their drawings were taken was preferred because it enabled students to express themselves better (Ersoy & Türkkan, 2010).

Data Analysis

In the context of data analysis, the initial step involved the identification of drawings to be included in the analysis. Criteria such as the drawings being relevant to the subject, the explanations being sincere, related to the drawing and the subject, and leaving no unanswered questions were examined. As a result of the analysis, 38 drawings were excluded from the analysis. The drawings excluded from the analysis mostly belonged to students from upper socio-economic level schools. Subsequently, the drawings to be analysed were numbered. Students were given a code name with the same number given to the drawing. The research data were analysed by content analysis. The basic process in content analysis is to reach concepts and relationships that can explain the collected data. The following stages were followed for the analysis: (1) coding the data, (2) finding themes, (3) organising the codes and themes, (4) defining and interpreting the findings (Yıldırım & Şimşek, 2016). In the first stage, each drawing was analysed separately, and the drawings' conceptual meaning was determined. According to the conceptual meanings, codes were determined, and an index was created. Then, the indexes were brought together, the codes were analysed, and the codes found were grouped under certain categories and themes reflecting the social studies course, and the content of the drawings in the learning-teaching process was formed. Care was taken to ensure that the themes could describe the data at this stage. As a result, a system was created to organise the data collected through detailed coding in the first stage and thematic coding in this stage. Then, the data were organised and defined according to the codes and themes that emerged by paying attention to the participants' drawings and their explanations about their drawings and grouped according to their common characteristics. In addition, the frequency of occurrence of the data was also analysed and noted. In the last stage, the relationship between the themes and the codes and categories within the themes was explained, and the findings were presented by making quotations from the drawings and participant opinions that were thought to be interesting and important.

In the study, the following strategies were used to ensure validity and reliability in qualitative research (Yıldırım & Şimşek, 2016): (1) Care was taken to make drawings under the supervision of the first researcher for clarity throughout the applications and to explain the points that were not understood. (2) Participants were not given guiding examples during the drawing process and were allowed to reflect on their thoughts. (3) The data analysis process was explained and reported in detail, and the participants' own drawings were included in the analysis and interpretation of the data. (4) The determination of codes, categories, themes and interpretation of the data were made by the researchers both individually and together. (5) Open-ended questions were used to diversify data sources and to make better interpretations.

Compliance with Ethical Standard

In this study, all the rules specified to be followed within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were complied with. The study was approved by by the Kutahya Dumlupınar University Social and Human Sciences Scientific Research and Publication Ethics Committee on the meeting dated 13.09.2019.

Findings

Within the framework of the sub-problems formed in the research, the characteristics of the social studies learning-teaching processes in schools were tried to be determined with the help of the drawings made by the students and the explanations for the drawings. Then, students' expectations for more effective social studies lessons were analysed.

Social Studies Learning-Teaching Process Characteristics Reflected in Student Drawings

The findings regarding the characteristics of the learning-teaching process in social studies classrooms reflected in student drawings were grouped under five theme as *learning-teaching environment, learning-teaching elements/features, methods and techniques/activities, teacher roles and behaviours,* and *student roles and behaviours*. The frequencies of the features within the scope of these dimensions and their distribution according to classes are presented in tables. In addition, some examples of student drawings and opinions are also included. When the students' drawings were analysed, it was seen that some students made drawings for their imagined learning environments, although they were expected to draw for their current lessons. Accordingly, students' drawings were analysed as "current social studies lessons" and "imaginary social studies lessons". The theme of current social studies lessons refers to the current practices taking place in schools. While 96 of the students made drawing reflecting their current social studies lessons, 22 of them drew their imagined social studies lessons.

Learning-Teaching Environment

The frequencies of social studies learning-teaching environments reflected in student drawings and their distribution according to classes are presented in Table 1. As presented in Table 1, the traditional classroom environment was depicted in the vast majority of student drawings (f=72) and in similar proportions in all classes. Accordingly, it can be said that students mostly think of the social studies course as a lesson in the classroom. The related drawings depicted the classroom with all its details, as in the drawing numbered 76. In 24 students' drawings, social studies lessons in out-of-school environments were included. The related drawings mostly reflected out-of-school learning environments such as *open air* (f=13) and *museums* (f=9) (Drawing 26 - Drawing 19). The drawings, including these learning environments, were mostly made by 6th-grade students. Some drawings, such as the school garden (f=2) and library (f=1), reflect social studies lessons held inside the school and outside the classroom.

Table 1

Social Studies Learning-Teaching Environments Reflected by Students in Their Drawings and Distribution Regarding Grades

Learning-Teaching Environment	Current Social Studies Lessons				Imaginary Social Studies Lessons			
	5th grade	6th grade	7th grade	Total	5th grade	6th grade	7th grade	Total
Classroom	24	28	20	72				
Open Air	3	5	5	13		1		1
Museum	3	5	1	9		1		1
School Garden		1	1	1				
Library	1			1				
Unrealistic Environment					8	9	2	19

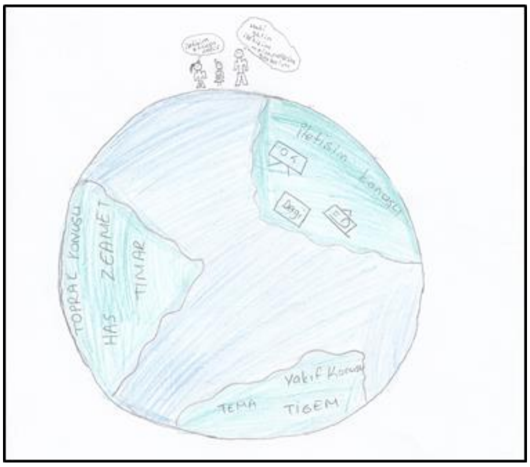
Some students made drawings for imaginary social studies lessons. These drawings generally included *unrealistic learning-teaching environments* such as space, the place where the source of the subject to be learnt is located, and above the clouds. As an example, the student in drawing number 25 indicated that s/he and her/his teacher could go to places on the earth where there was a lot of communication. The related drawings belonged mostly to 6th (f=10) and 5th grade (f=8) students. Some 7th-grade students (f=3) also made drawings involving unrealistic learning environments. The museum (f=1) for the 6th-grade level was the least used environment in imaginary drawings. The fact that the museum included dinosaurs and historical elements such as the Orkhon inscriptions was effective in the evaluation of this drawing as imaginary, and it was evaluated as imaginary because the existence of such a museum was out of the question.

Figure 1

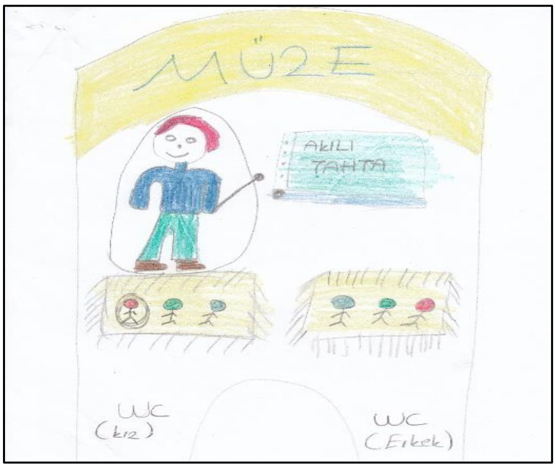
Drawing Examples of Learning-Teaching Environment

Drawing 76

Drawing 25



Drawing 19



Drawing 26

Learning-Teaching Elements/Features

The frequencies of the elements of the social studies learning-teaching process reflected in the students' drawings and their distribution according to classes are shown in Table 2. Table 2 shows that the most frequently occurring element (f=62) in student drawings related to current social studies classes across all grade levels is the *traditional seating arrangement*. To illustrate this, in Drawing 77, students have mostly depicted the classroom in full detail, showing the teacher lecturing near the desk and board. An interactive seating arrangement is noticeable in a limited number of drawings (f=2). For instance, in Drawing 21, while students are still sitting in a *traditional seating arrangement*, the teacher is walking around asking questions, and students are participating in the lesson by expressing their opinions.

Table 2

Learning-Teaching Elements/Features of Social Studies Lessons Reflected by Students in Their Drawings and Their Distribution Regarding to Grades

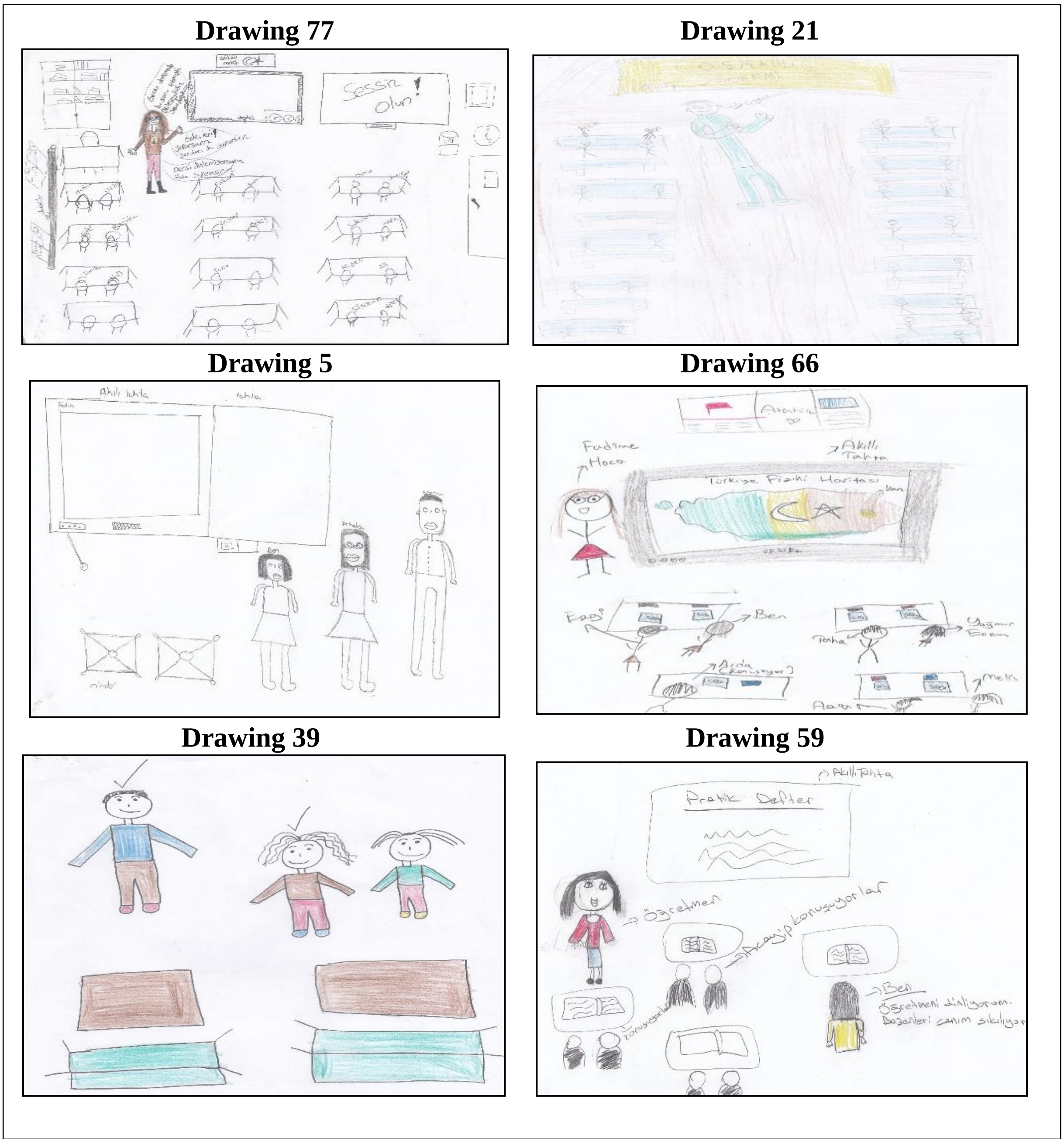
Learning-Teaching Elements/Features	**Current Social Studies Lessons**				**Imaginary Social Studies Lessons**			
	5th grade	6th grade	7th grade	Total	5th grade	6th grade	7th grade	Total
Traditional seating arrangement	23	23	19	65	2	2	2	6
Smartboard	14	16	14	44	1	2		3
Whiteboard	9	16	9	34	1	1	2	4
Use of visual material on the board	9	14	8	31				
Book-notebook	10	8	7	25	1	1	1	3
Flexible classroom environment	6	8	9	23	4	2		6
Interactive open seating arrangement	4	12	4	20	4	8		12
Green area	3	6	4	13	6	4	2	12
Historical artefacts	3	6	1	10				
Authority-free classroom	2	2	1	5				
Real objects	1	1		2				
Interactive seating arrangement		1	1	2	1		1	2
Costumed guest		1		1				

Some students (f=20) have not included a seating arrangement in their drawings. These drawings have been coded as *interactive open seating arrangements* because the teachers are depicted close to the students. The majority of such drawings belong to 6th-grade students (f=12). For example, the student who created Drawing 5 has included sitting cushions instead of desks and has depicted conversing with the teacher about the subject. Another notable element in many of the drawings is the presence of *smartboards* (f=44) and *whiteboards* (f=34), as well as the emphasis on the *use of visual materials on the board* (f=31). These visuals usually include maps of Turkey and the world or figures and charts related to the subject. In Drawing 66, for instance, comprehensive information about the interactive whiteboard is provided, including its manufacturer, control features, and affiliation with a governmental initiative. It is generally observed that the teacher is coordinating the lesson with the smart board. Additionally, some drawings (f=25) pay attention to the book and notebooks' details. In

Drawing 66, for example, the presence of an open book and notebook on the desk is emphasised, and a pencil is usually drawn next to the notebook.

Figure 2

Drawing Examples of Learning-Teaching Elements/Features-1

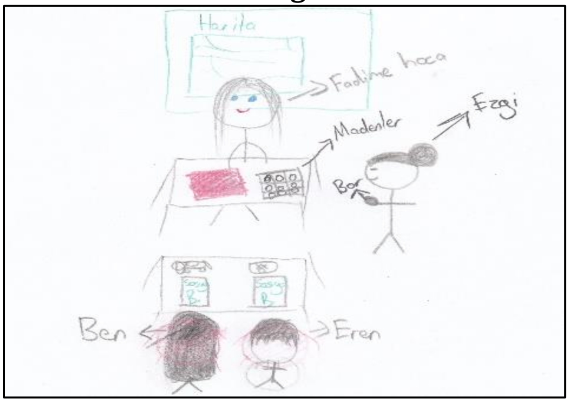


Some students have included drawings that depict a *flexible classroom environment* in addition to the traditional classroom setup (f=23). This code has been used to indicate that students are engaged in different activities during the lesson. For example, the student who created Drawing 39 has explained, "*I go up to my teacher during social studies class to ask a question. Our teacher teaches us at her desk. My friends are reading a passage from the social studies book*." Based on this finding, it can be said that sometimes more flexible learning environments can be created in social studies classes as opposed to authoritative classroom setups. However, in a limited number of student drawings (f=6), there are also reflections indicating the existence of social studies classes that exhibit features of an *authority-free classroom*. While in a flexible classroom environment, students are engaged in various learning activities related to the lesson, in an authority-free classroom environment, students display negative out-of-lesson activities and behaviours. For instance, the student who created Drawing 59 has commented, "*Some are listening to the lesson. Some are talking weirdly and throwing shade at each other*."

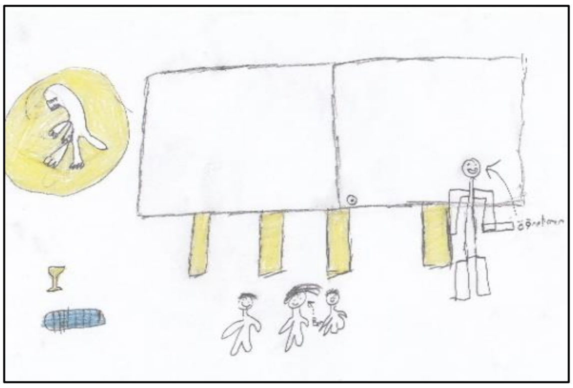
Figure 3

Drawing Examples of Learning-Teaching Elements/Features-2

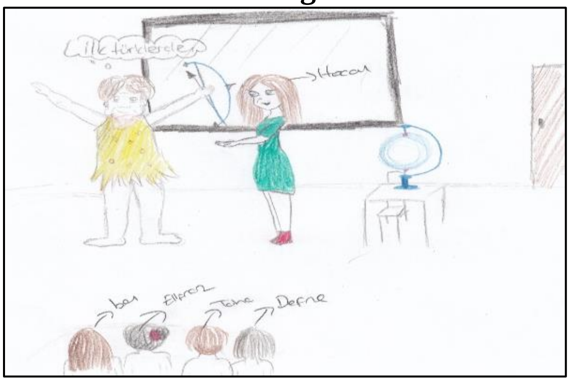
Drawing 63



Drawing 16



Drawing 69



Drawing 100

In terms of other elements that attracted attention in fewer student drawings (Figure 3), it is understood that sometimes a *green area* (f=12) is used in social studies lessons, *historical artefacts* such as historical bowls, vases, ancient coins, fossils (f=10, Drawing 16), *real objects* such as mineral samples (f=2, Drawing 63) and *costumed guests* representing a certain period (f=1, Drawing 69) are brought to the lessons. In the drawings of imaginary social studies lessons, it was observed that the students mostly depicted an *interactive open seating* (f=12) and a *green area* (f=12, Drawing 100). On the other hand, some students imagined a *traditional seating arrangement* (f=6) or *interactive seating arrangement* (f=2), *whiteboard* (f=4), *smartboard* (f=3), *book-notebook* (f=3), and even outdoors. In addition, some drawings of imaginary social studies lessons showed a *flexible classroom environment* (f=6). For example, one student stated that they learned by playing games in the forest. In drawing number 27, the student stated that he and his teacher examined the stars through a telescope in the forest.

Methods and Techniques/Activities

The frequencies of the methods and techniques of social studies courses reflected in the students' drawings and their distribution by grade are shown in Table 3. The frequencies of the methods and techniques of social studies courses reflected in the students' drawings and their distribution by grade are shown in Table 3. According to Table 3, the use of *teacher-centred* (f=80) methods in the majority of the drawings for the current social studies course draws attention. The methods were accepted as teacher-centred in all drawings in which the teacher was reflected more actively.

Table 3

Methods and Techniques/Activities in Social Studies Lessons Reflected by Students in Their Drawings and Distribution Regarding Grades

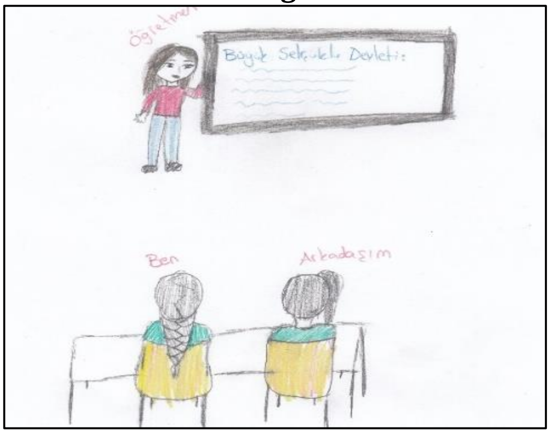
Methods and Techniques/Activities	**Current Social Studies Lessons**				**Imaginary Social Studies Lessons**			
	5th grade	6th grade	7th grade	Total	5th grade	6th grade	7th grade	Total
Teacher-centred	28	29	23	80	2	3	2	7
Student-centred	2	5	1	8		7		7
One-to-one teaching	1	4	2	7	6	1	1	8

As shown in drawing number 68 and the previous drawings of traditional classroom environments, most of the students portrayed themselves in the classroom listening to the teacher. Even in the drawings where open air is shown as the learning environment, there are students listening to the teacher. On the other hand, some drawings emphasised *student-centred* (f=8) or *one-to-one* (f=7) methods in which students were more active (Drawing 50). 6th-grade students mostly made the related drawings. In the drawings in which students included their dreams about the social studies course, it is seen that *one-to-one teaching* (f=8), *teacher-centred* (f=7), and *student-centred* (f=7) techniques are used. It can be said that the teacher-centred methods are not dominant in these drawings. The common feature in the imaginary social studies lessons is that students depict out-of-school environments, as seen in Drawing 47. In addition, drawings involving student-centred and one-to-one teaching methods are more intense in 5th and 6th-grade students. Some sample drawings are given below.

Figure 4

Drawing Examples of Methods and Techniques/Activities

Drawing 68



Drawing 50

Drawing 47

Teacher Roles and Behaviours

The frequencies of teacher role/behaviours in social studies lessons reflected in student drawings and their distribution according to classes are presented in Table 4.

Table 4

Teacher Role/Behaviours in Social Studies Lessons Reflected by Students in Their Drawings and Distribution Regarding Grades

Teacher Roles and Behaviours	**Current Social Studies Lessons**				**Imaginary Social Studies Lessons**			
	5th grade	6th grade	7th grade	Total	5th grade	6th grade	7th grade	Total
Making a presentation	25	26	24	75	7	2	2	11
Being next to the whiteboard	18	17	10	45	1	1	2	4
Interactive teaching with students	8	11	5	24	5	6	1	12
Teaching by showing	6	13	3	22	1	7	1	9
Being in front of the class	3	8	8	19				
Using body language	4	5	2	11				
Listening		5		5		1		1
Using costume		1		1		1		1

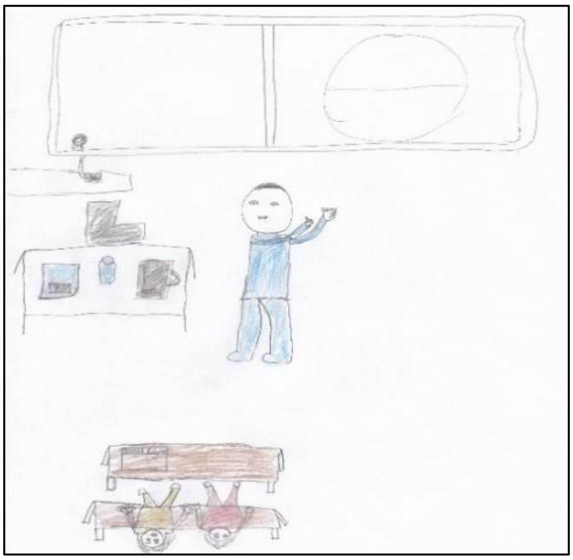
In Table 4, the teacher's roles and behaviours in the current social studies lesson drawings are reflected as *making a presentation* (f=75), *being next to the whiteboard* (f=45), *interactive teaching with students* (f=24), *teaching by showing* (f=22), *being in front of the class* (f=19), *using body language* (f=11), *listening* (f=5) and *using costume* (f=1). As in Drawing 2, in all classes, the teacher was mostly portrayed as making a presentation (f=75). The students generally described their teacher's role as "*giving a lesson*". Accordingly, it can be understood that students see the social studies course as a course in which teaching is done through an expository instruction method. In addition, in the majority of the drawings, the teachers were either *next to the whiteboard* (f=45) or *in front of the class* (f=19) (Drawing 54).

In some existing drawings of social studies lessons, it was emphasised that although the teacher made a presentation, the teacher gave an *interactive teaching with the students* (f=24). In the drawings, the relevant code was created because the teacher's position in the classroom was far from the board, close to the students, between the desks, and the students stated that they asked questions to the teacher. Also, in some drawings, based on the students' explanations, it is understood that these explanations are based on *teaching by showing* (f=22) and the *use of body language* (f=19) (Drawing 42 and Drawing 13).

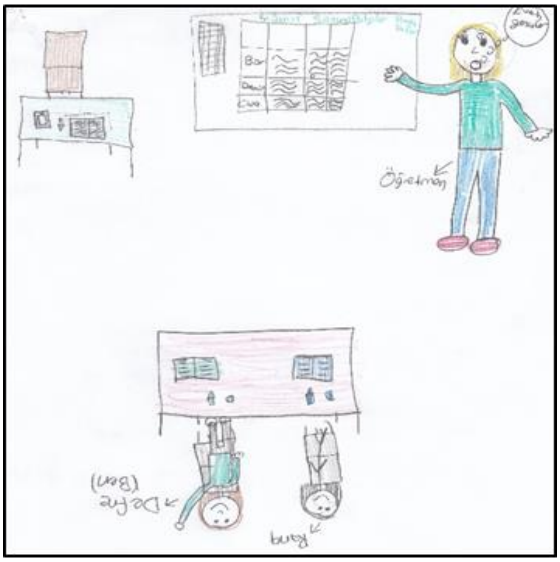
Figure 5

Drawing Examples of Teacher Role/Behaviours in Social Studies Lessons-1

Drawing 2

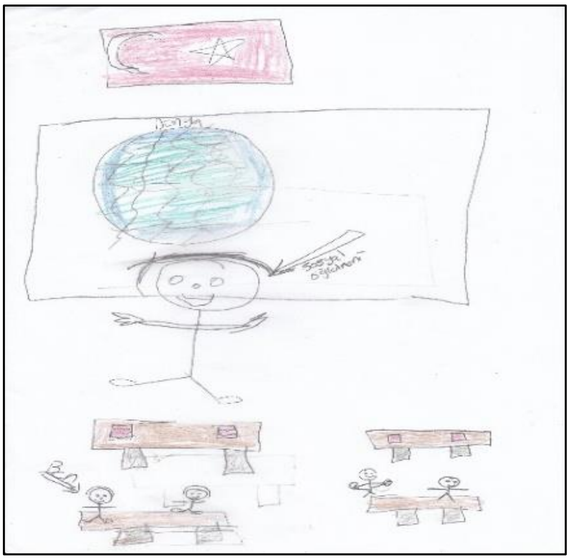


Drawing 54



Drawing 13

Drawing 42



Student Roles and Behaviours

As seen in Table 5, there are 11 roles and behaviours determined as *listening to the lesson* (f=60), *being uninterested* (f=28), *question-answer* (f=21), *interaction with the teacher* (f=16), *note-taking* (f=12), *following the lesson* (f=9), *talking with the teacher* (f=5), *reading* (f=3), *research* (f=2), *giving a lesson* (f=1) and *giving an example* (f=1). Following the lesson (60) was the student role and behaviour that the students included the most in their drawings. This emphasis is seen at similar rates at all grade levels. Students were usually depicted as sitting at their desks and listening to the teacher, as in drawing number 1. The other most common element related to the role and behaviour of the student in the drawings was being disinterested (f=28). This element is both reflected in the students' drawings and emphasised in their explanations. To illustrate this, student number 56 said, "*I get lost in my thoughts. My teacher gives a boring and sleep-inducing lesson. The front part of the class tries to talk to the back of the class*". Other student behaviours that were more frequently encountered in the drawings were *question-answer* (f=21, Drawing 53), *note-taking* (f=12) and *interaction with the teacher* (f=7).

Table 5

Student Role/Behaviours in Social Studies Lessons Reflected by Students in Their Drawings and Distribution Regarding Grades

Student Roles and Behaviours	**Current Social Studies Lessons**				**Imaginary Social Studies Lessons**			
	5th grade	6th grade	7th grade	Total	5th grade	6th grade	7th grade	Total
Listening to the lesson	15	23	22	60	5	3	1	9
Being uninterested	8	10	10	28	4	2		6
Question and answer	9	5	7	21	1		1	2
Interaction with the teacher	6	7	3	16	2	4	1	7
Note-taking	6	3	3	12			1	1
Following the lesson	4	5		9		4		4
Conversation with the teacher	1	2	2	5		1	1	2
Reading	1	1	1	3		1		1
Research		2		2		1		1
Explaining		1		1				
Giving an example		1		1				
Doing homework					1			1

In the drawings reflecting the imaginary social studies course, *listening to the lesson* (f=9) and *interaction with the teacher* (f=7) were mostly highlighted. Furthermore, roles and behaviours such as *being disinterested* (f=6), *following up the lesson* (f=4), *question-answer* (f=2), *talking to the teacher* (f=2), *taking notes* (f=1), *reading* (f=1), *research* (f=1) and *doing homework* (f=1) were depicted, which are also not very different from the actual lessons. In

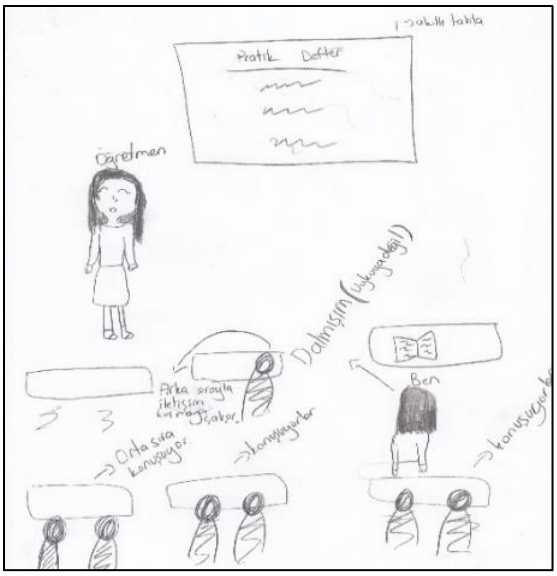
Drawing 104, the student noted that the teacher explained the subject of agriculture by taking the student to the field.

Figure 6

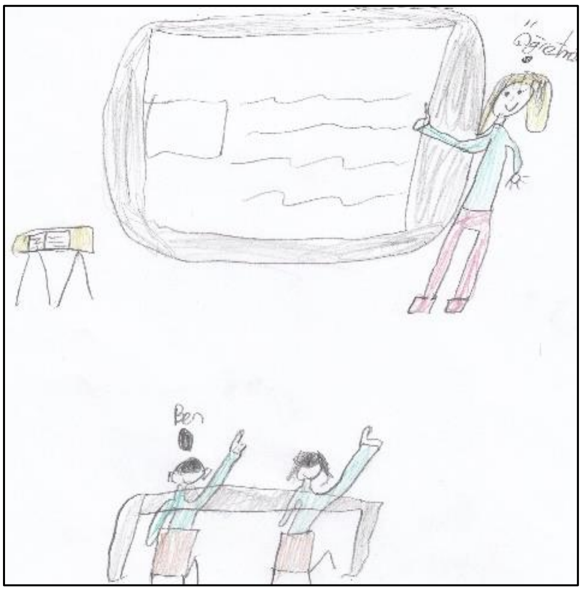
Drawing Examples of Student Role/Behaviours in Social Studies Lessons

Drawing 1

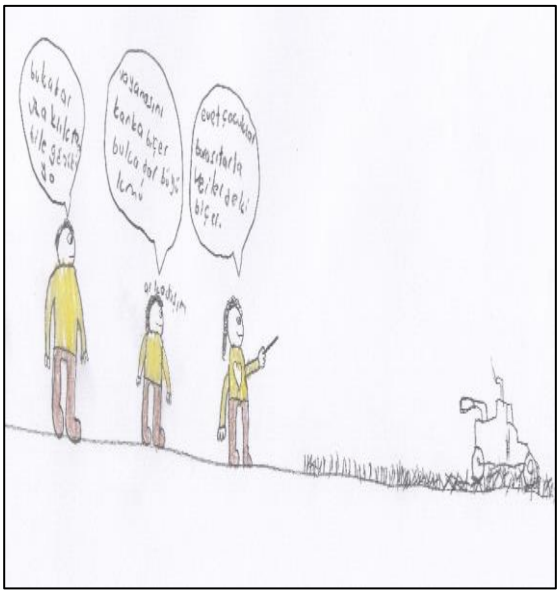
Drawing 56



Drawing 53



Drawing 104



Students' Expectations for Effective Social Studies Courses

In the study context, the students were asked what was missing in their drawings, how they would learn better if social studies lessons were taught, and how they were asked to describe the lesson in their imagination. Thus, the expectations of the students towards the social studies course were tried to be determined. Expectations expressed by the students, their frequencies and distribution according to classes are presented in Table 6.

Table 6

Distribution of Students' Expectations towards a More Effective Social Studies Course Regarding Grades

Expectations for an Effective Social Studies Course	5th grade	6th grade	7th grade	Total
Expectations towards the teaching process	26	27	24	77
Fun lesson	6	6	5	17
The use of games	4	8		12
More activities	2	4	3	9
Excursion	6		2	8
The use of figures		1	5	6
Use of visuals	2	2	2	6
Costume use		4	1	5
No writing	3		1	4
Use of music		1	2	3
Drama		3		3
The use of technology	1		2	3
Inviting guests to class	2	1		3
Shadow play		2		2
Use of cartoons			1	1
Providing interesting facts		1		1
Visual learning		1		1
Use of virtual reality		1		1
Conducting research			1	1
More topics related to Ataturk			1	1
Easier lesson			1	1
Not using a smart board	1			1
Prize question	1			1
Studying by eating ice cream	1			1
Expectations for the Classroom Environment	6	6	13	25
Outdoor lesson	5	4	13	22
Noiseless classroom	1	2		3
Expectations towards the Teacher		1	3	4
Being friendly			2	2
Avoidance of negative behaviour			1	1
Helping teacher		1		1
Satisfaction with the Current Lesson	3	3	3	9

As a result of the analysis of the students' responses, the categories of "*expectations towards the classroom environment*", "*expectations towards the teacher*", "*expectations towards the teaching process*", and "*satisfaction with the current course*" were formed.

As can be seen in Table 6, the majority (f=77) of the expectations that the students stated for an effective social studies lesson were related to the teaching process. The most prominent of these expectations are more *fun lessons* (f=17) and *the use of games* (f=12). Then, expectations for *more activities* (f=9), *excursions* (f=8), *use of figures* (f=6), and *use of visuals* (f=6) are noteworthy. 5th-grade students mostly pointed out fun lessons (f=6) and excursions (f=6), 6th-grade students emphasised the use of games (f=8), and 7th-grade students also highlighted more fun lessons (f=5) and the use of figures (f=5). Below are some sample excerpts of student statements containing expectations related to this category:

> I would like to wear costumes with more fun games and activities. I would like us to create the subject. I would like to teach it in the garden. I would like a well-known person to come and teach us. (Student 30)
>
> There are no games related to social studies. Playing games related to that subject after the lesson (Student 45).
>
> I think we should teach each different subject in different places. Because we can both see the places we have not seen, and the lesson will be more permanent in our minds. (Student 25)
>
> I think I have fun in the social studies lesson, but if our teacher brings us two or three figures related to what he is telling us, that would be fine. (Student 19)

A significant number of students indicated some expectations about the classroom environment towards effective social studies lessons. Almost all of the students (22) expressed that they preferred the lessons to be conducted *outdoors*, and some students emphasised the expectation of a *noiseless classroom* (3). The majority of those who wanted outdoor lessons were 7th-grade students (13). The expectation of a noiseless classroom was expressed by 5th (1) and 6th (2) grade students.

Some of the students expressed expectations towards the teacher for an effective social studies lesson. In this regard, some 6th-grade students stated that more effective lessons could be taught with a *helping teacher* (1), and some 7th-grade students mentioned that they expected the *teacher to be friendly* (2) and *avoid negative behaviours* (1). In all grade levels, some students (9) stated that they did not have any expectations for their lessons and that they were satisfied with their current lessons. Below are some sample excerpts of student statements containing these expectations:

I would have learnt better if there were more people around and more examples. In my imagination, I imagine the social lesson while sitting in the garden with my teacher and friends, doing different activities about the subject. (Student 47)

My dream social class is spent outside at tables and playing games. (Student 54)

The teacher should stay away from most negative behaviours and conduct the lesson in a friendly manner.” (Student 1)

I think the social studies course lacks a helping teacher; it would be fun if there were an additional teacher, and the lesson would be more impressive. (Student 10)

My dream course is the same as the real one (Student 79)

Discussion and Results

This study aims to determine the characteristics of the learning-teaching process of social studies lessons through the drawings of students who experience social studies lessons in schools. Yavuzer (2019) noted that drawings reflect children’s inner worlds and that a good analysis will provide important information about the child’s perceptions. Based on this understanding, sample studies were conducted to determine the perceptions of students and children towards different courses, concepts, or phenomena. Based on the findings of these studies, it can be asserted that the utilisation of the drawing method constitutes a potent measurement tool for assessing students’ comprehension of their visual and experiential surroundings.

In terms of the results of the research, it was determined that most of the students’ drawings reflecting social studies lessons were related to in-class learning-teaching environments. However, out-of-class and out-of-school learning environments such as outdoors, museums, school gardens and libraries were reflected in relatively limited numbers. Accordingly, it can be said that the most frequently used out-of-class learning environments by teachers are mostly outdoor areas, school gardens, museums and libraries. This can be explained by the study of Malkoç and Kaya (2015). In the related study, it was determined that teachers mostly preferred the school garden, library, gymnasium, multi-purpose hall, corridor, laboratory, and social studies classroom as out-of-class learning environments in social studies teaching, and the most used out-of-class school environment was the garden. In addition, it was determined that 6th-grade students included museum drawings more than 5th and 7th-grade students in the drawings analysed.

As it is known, the social studies curriculum considers it important to benefit from out-of-school environments such as museums, historical buildings, monuments, museum cities and battlefields in terms of effective teaching (MoNE, 2018). On the other hand, gains for museum education are evident in the 6th grade Culture and Heritage learning area. From this point of view, it can be thought that the students' going to a museum or a trip both in the classroom environment and as an out-of-class activity was more effective and memorable for them, and they reflected this situation more in their drawings. In support of this research result, in Solmaz's (2015) study, teachers stated that museum education in social studies courses is essential in terms of concretising the lesson, facilitating learning, ensuring the retention of information and teaching history subjects. In parallel with this, many experimental studies (Çerkez, 2011; Filiz, 2010; Güleç & Alkış, 2003; Meydan & Akkuş, 2014; Şişman, 2019) concluded that the use of museums in social studies courses improves students' cognitive skills, increases their academic achievement, makes the lesson concrete, facilitates the teaching of history topics, enables students to enjoy the lesson and develop positive attitudes towards the lesson.

As a result of the research, it becomes evident that there is a significant need to enhance and broaden the utilisation of extracurricular learning environments, even though conventional teaching primarily occurs within the confines of the classroom. Because in this study, a significant portion of the students expressed an expectation for outdoor learning and excursions. The preference for out-of-class and out-of-school environments is striking in all drawings of imaginary social studies lessons. In the related drawings, it was determined that they included unrealistic learning environments and lessons in the open air, especially in the green area, although the teacher activity was dominant. In the study of Baysal at al. (2018), in which a similar result was reached in the literature, students stated that they mostly wanted to teach the lesson in outdoor environments such as nature, school garden, gazebo, orchard. Therefore, it can be thought that students long for social studies lessons in non-traditional learning environments, and it can be said that lessons held in out-of-class environments can support students' social development as well as provide more effective and permanent learning. As a matter of fact, there are various studies in the literature that determine that garden-based education activities improve students' social skills and contribute to their learning experiences (Malkoç & Kaya, 2015; Skinner & Chi, 2012). In addition, there are studies showing that teachers do not frequently prefer out-of-class activities in social studies, but they increase students' attitudes towards the course and positively affect student achievement (Güngören, 2015; Karakaş et al., 2017). All these results can be accepted as evidence that social studies courses should be enriched with learning outside the classroom and school.

It was determined that the students mostly reflected the traditional order in their drawings. As stated before and reflected in the students' drawings, it can be thought that such an order is reflected predominantly due to the use of learning environments for the classroom in social studies lessons. In the study of Kuş and Çelikkaya (2010), teachers stated that they mostly used the traditional order, then cluster or U order in social studies lessons. In the study conducted by Aykaç (2012), it was determined that elementary school students made drawings expressing traditional order, semicircle and U order, respectively. In this study, some of the students' imaginary drawings included drawings reflecting the intense interaction between the teacher and the students instead of a sequential order in the classroom. In the study conducted by Karaman and Akbaba (2020), it was concluded that students imagined the classroom order in the social studies course in the form of flying desks and flexible desks. In this respect, it can be said that students prefer classroom environments where they can interact better with their teachers instead of a traditional seating arrangement. In the study conducted by McGowan et al. (1990), it was concluded that students' attitudes towards the social studies course were determined by the teacher's interaction with the students. Therefore, it is clear that there is a need for a significant transformation of classroom organisation in schools.

In the study, the smart board was one of the most reflected elements for all grade levels. It was noticed that students included even details such as the state project to which the board is connected and formal elements in their drawings of smart boards. Since students reflected smart boards in their drawings in such a detailed way, it can be inferred that social studies courses are smart board-oriented. In the related literature, it has been determined that teachers use smart boards for reasons such as reinforcing the lesson, attracting attention, enriching with examples, making it fun, facilitating the expression of abstract concepts and increasing academic achievement (Çoklar & Tercan, 2014; Eren, 2018; Karaca, 2018). Related reasons may have increased the use of smart boards in social studies lessons. However, when considering together with the results of the study that the lessons based on teacher presentation are intensive, it seems that the smart board is only used to support the teacher's presentation

In this study, in most of the student drawings of existing social studies lessons, the book and notebook element was frequently used in addition to the smart board. In the related drawings, the presence of the book and notebook opened on the desk was emphasised, and the pen was usually drawn next to the notebook. In detail, the fact that one of the students who included the related drawing stated that the first thing that came to his mind was the textbook in a dissatisfied manner may suggest that he had a dislike for the use of books in the lesson and that the lesson was mostly book-oriented. In the literature, it has been concluded in various studies that materials such as smart boards and textbooks are frequently used in lessons (Akengin & Demirsoy, 2011; Baysal et al. 2018). In the research conducted by Alazzi & Chiodo (2004), they identified textbooks as the basic teaching tool for in-depth social studies topics, similar to those that have become widespread. Accordingly, it can be thought that teachers use teaching materials in a traditional way, do not diversify them sufficiently or do not structure them in a way that makes students active.

In the results of the research on student expectations, some students expressed their boredom with traditional practices with expectation expressions such as not using smartboards and not writing. In addition, many students emphasised that they needed more fun lessons with more activities, diversification of the learning environment in a wide range of subjects such as music, cartoons, shadow play, virtual reality, figures, visuals, costumes, use of technology and bringing experts to the lesson.

In the students' drawings, social studies lessons were mostly reflected as teacher-centred methods and techniques based on teacher presentation. Similarly, in the learning-teaching process features reflected in the drawings, it was determined that the students were mostly reflected as sitting in a row and listening to the lesson. Accordingly, it can be said that students mostly passively listen to the social studies lesson and see it as a lesson in which the teacher gives a lecture. In the literature, there are many studies determining that teachers mostly use teacher-centred methods such as lecture and question-answer in social studies lessons (Akengin & Demirsoy, 2011; Akgül, 2006; Akşit, 2011; Aydemir, 2012; Aykaç, 2012; Coşkun Cımbız, 2016; Çelikkaya & Kuş, 2009; Ergani, 2010; Karaca, 2017; Polat, 2006; Ünal, 2012).

In the research developed by Hansberry and Moroz (2001), detailed social studies are found to be interesting due to its in-depth, teacher-centered and direct narrative structure. In the studies, it was found that teachers stated that they used teacher-centred methods (Çelikkaya & Kuş, 2009; Erdoğdu, 2010) for many reasons, such as overcrowded classrooms, limited class time and intensive curriculum, lack of adequate equipment in terms of tools and materials, and students' exam anxiety. However, there are many studies revealing the positive effects of using student-centred methods on students. Öztürk and Baysal (1999) concluded that the use of lectures and intensive use of books in social studies lessons did not make a significant difference in students' attitudes towards the course, while activities such as cluster work, question-answer, discussion, game, excursion-observation made a significant difference in students' attitudes towards the course. All these results show that neither the national curriculum nor the expectations of the students in this and other research for learning-teaching processes in which students are active in learning environments have been met. It is clear that a comprehensive and decisive reform is needed.

In the students' drawings about the class element that lacks authority, it was determined that the students were bored with the lesson and engaged in extracurricular activities. Based on this, it can be said that students see the social studies course as a boring and monotonous course. In a similar study supporting this result in the literature, Lammons Busey (2013) found that Latino students in 6th, 7th and 8th grades expressed the social studies course as a course with unnecessary, boring, uninteresting subjects and methods. In this context, it can be thought that students want to teach the course with activity-oriented and interesting elements. In the literature, there are various studies that conclude that the use of educational games in social studies courses increases students' interest and participation in the course, ensures the permanence of their learning and positively affects their course success (Altınbulak et al., 2006; Pehlivan, 1997; Uygun et al., 2018).

Regarding the learning-teaching elements in the social studies course, it was observed that the students reflected the real objects brought by the teacher to the class in their drawings. The students who included the relevant drawings stated that they learned better with the use of these objects and figures in the lesson. Considering this, it can be thought that the real objects and figures brought to the classroom in the social studies course are more effective in students' learning and that students want to learn with new methods and techniques and different applications in the course. In this context, it can be thought that students want to be active in the lesson, to make their own decisions about the lesson by experiencing the lesson beyond just taking notes of what the teacher says and that it would be appropriate to teach the lessons with active learning strategies. In addition, various studies in the literature show that using active learning techniques in social studies teaching is beneficial for students (Alazzi & Chiodo, 2004; Bodur, 2011; Çelikcan, 2010; Soylu Erdoğ, 2010). To illustrate, Ayva (2010) found that the use of active learning practices in the social studies learning and teaching process enabled students to participate in and enjoy the lesson. In their study, Duman and Şahiner (2008) determined that the use of active learning in the social studies course both developed democratic attitudes and positively affected students' achievement. In addition, Kalem and Fer (2003) determined that the lesson taught with active learning principles positively affected students, provided enriched lesson environments, and enabled students to enjoy the lesson. In the research developed by Chiodo and Byford (2004), the characteristics of a classroom environment and a cheerful teacher's way of being actively provided for the development of positive attitudes towards the depths of social studies were determined. In the research conducted by Schug et al. (1982), which investigated whether people find social studies-related subjects interesting, it was established that they used active teaching techniques such as more group projects, field trips, role playing and simulation in the course.

This research has important results in terms of revealing how secondary school students perceive the social studies course learning-teaching process through their drawings. In the research, it was determined that the students mostly took the social studies course in the traditional order in the classroom learning environment and that the teacher reflected it in their drawings as an active narrator. However, it was observed that during the lesson, students generally acted as passive listeners, indifferent or answering the teacher's questions. It can be said that in the drawings in which the students' dreams are included, there is an environment exactly opposite to what is reflected. So much so that students drew their imaginary social studies course process outside the classroom and in flexible learning environments, with one-on-one teaching opportunities with their teachers.

It was concluded that the students’ expectations for a more effective social studies course were shaped by the use of alternative teaching methods and techniques such as fun, diverse in terms of games and activities, excursions, music and drama, just as they included in their imaginary drawings. Based on this, it can be said that students want the social studies course to be handled with a constructivist and student-centered approach, apart from traditional practices.

Although this study has important results that reveal how the social studies course learning-teaching process is perceived and realised through the drawings of secondary school students, it has some limitations. First of all, the study was conducted only with 118 secondary school students studying in three schools in Isparta city centre. In other words, it can be seen as limited to the meaning of social studies lessons in these three schools. The main data collection source of the study is drawings, and the explanations for these drawings are limited.

Recommendations

In the context of the results obtained in this research, the following suggestions can be made:

- It may be recommended that teachers use out-of-class learning environments more, interact more with students, and include more out-of-class and out-of-school learning activities in the learning environment.
- Teachers may be advised to support students' more active participation in the lesson and to create classroom environments in which students are active.
- It may be suggested that teachers should be warmer and have a more positive attitude towards the class.
- It may be suggested that teachers make the lesson more fun and support the lesson with more different activities and educational games.
- It may be recommended to choose flexible and interactive desk layouts in classrooms.
- The field can be described in detail through case studies enriched with different samples and different data collection methods.
- In order to obtain more concrete and in-depth ideas from students, drawing exercises can be combined with semi-structured interviews, observations, etc. It can be supported by different data collection methods such as.

Ethics Committee Permission Information

Name of the Board that Made the Ethical Evaluation: Kütahya Dumlupınar University
Date of Ethical Rewiew Decision: 13.09.2019
Ethics Assessment Document Issue Number: 56120658-044-

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The Direct and Indirect Effects of Positive Future Expectations on Psychological Well-Being of College Students: Quiet Ego as A Mediator

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Abstract **Research Article**

The aim of this study was to examine the associations between positive future expectations, quiet ego, and psychological well-being among college students. It was hypothesized that there would be direct and indirect effects of positive future expectations on psychological well-being through quiet ego. The data was gathered from a sample consisting of 250 college students. Participants completed several instruments, namely, the Positive Future Expectation Scale, the Quiet Ego Scale, the Flourishing Scale, and the demographic information form. The analyses revealed that there is a significant direct effect of positive future expectations on psychological wellbeing. It was also found that there is a significant indirect effect of positive future expectations on psychological wellbeing via quiet ego. The obtained findings were discussed within the context of existing research. This study contributes to the expanding body of literature on psychological well-being by demonstrating that the quiet ego serves as a factor in explaining how positive future expectations are connected to psychological well-being.

Keywords: Positive future expectations, quiet ego, psychological well-being, college students, mediation analysis

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Introduction

In recent years, there has been a noticeable shift in the field of psychology towards positive psychology, which emphasizes the development of positive qualities in individuals rather than solely addressing negative features that impact their mental health. This shift has prompted a rise in positive psychology research (Seligman & Csikszentmihalyi, 2000). Simultaneously, terms such as well-being (Diener, 1984; Ryff, 1989, 1995), happiness (Ryff, 1989; Waterman, 1993), life satisfaction (Neugarten et al., 1961), hope, optimism (Seligman & Csikszentmihalyi, 2000), and flow (Herzog & Strevey, 2008), as well as concepts such as quiet ego (Bauer & Wayment, 2008), humility (Kesebir, 2014; Tangney, 2000), and gratitude (Emmons & McCullough, 2003), which refers to go beyond self-centeredness, have acquired popularity in the field of psychology. However, such psychological constructs have already been known for many years in some Eastern cultures which have spiritual and collectivistic elements and people within these cultures have been encouraged to improve these qualities to achieve flow. Turkey also has a social structure that encompasses spiritual (Karairmak, 2004) and collectivist aspects (Hofstede, 2001; Kagitcibasi, 2005). Its cultural atmosphere invites its members to quiet their egos and transcend their self-centeredness to achieve both individual and social well-being. In parallel with this invitation, there is a growing body of research in the current literature addressing the relationship between quiet ego and well-being and indicating that the quiet ego is one of the key determinants of psychological well-being (Liu et al., 2022; Niemic et al., 2008; Wayment & Bauer, 2018; Wayment et al., 2015). Nevertheless, a limited amount of research has provided comprehensive insight into the underlying mechanism of this relationship. The present study aimed to obtain a deeper comprehension of the relationship between quiet ego and psychological well-being and considered the concept of positive future expectations as a predictor.

Positive future expectation refers to an optimistic attitude about upcoming events and circumstances (Imamoglu, 2001; Imamoglu & Guler-Edwards, 2007). Given that one of the quiet ego's primary concerns is long-term personal growth (Bauer & Wayment, 2008; Liu et al., 2022), it is hypothesized that this aspect of quiet ego would link it to positive future expectations. Furthermore, positive future expectation is related to self-development, which plays a crucial role in the formation of identity throughout the stage of emerging adulthood, as noted by Marcia (1983) and it is influenced by the sociocultural environment that is determined by external stresses (Stoddard & Pierce, 2015). These connections point out the necessity of exploring the relationships between positive future expectations, quiet ego, and psychological well-being during the period of emerging adulthood. Besides that, a recent study, the Global Youth Wellbeing Index, undertaken by the International Youth Foundation (2017), has also presented interesting findings highlighting the necessity of investigating these linkages. According to the results of this study, young people in Turkey reported the highest levels of stress among all the countries included in the index, but they were still optimistic about the future. This finding may be related to the fact that Turkey's collectivist and spiritual cultural structure, which supports the quiet ego, is also reflected in the younger generations. As a matter of the fact, various studies in the existing literature have shown that quiet ego is associated with higher levels of subjective well-being and reduced stress levels (Wayment & Bauer, 2018; Wayment et al., 2015, 2016). Many individuals in the period of emerging adulthood are enrolled as students, and their experience of being a student is often characterized by a notable tendency toward future (Huang et al., 2021). During the college years, students are engaged in reflection regarding their commitments and objectives, which will eventually serve as the foundation for their forthcoming adulthood (Arnett, 2014). However, both the recent pandemic and the economic difficulties it brings with it, and the post-graduation plans of college students might have negatively affected young people's positive emotions about future and their ability to maintain their lives effectively (Çevik & Öneren, 2019; Çiçek & Almalı, 2020). In such a challenging process, it is vital for college students to maintain their psychological well-being and develop positive expectations for the future, and quiet ego may contribute to supporting these two psychological structures. From this point of view, this study focused on the period of emerging adulthood and aimed to examine the role of quiet ego in the relationship between positive future expectations and psychological well-being of college students.

Psychological Well-being

Within the existing body of literature, it is widely acknowledged that the construct of psychological well-being has predominantly been constructed upon two fundamental philosophical frameworks, namely hedonism and eudaimonia (Ryff & Singer, 2008). Hedonism, as a philosophical concept, refers to the act of making decisions based on the pursuit of pleasure, with the objective of constructing a life characterized by happiness and contentment (Ryan & Deci, 2001). Eudaimonia, a concept attributed to the well-known philosopher Aristotle, pertains to achieving of the highest point of goods and perfection through the realization of one's unique and inherent potential (Ryff, 1989, 1995). In the present study, our primary focus was directed towards the latter construct, namely eudemonic well-being. Within the eudemonic perspective, psychological well-being is equivalent to positive psychological functioning (Ryff, 1989; Ryff & Singer, 2008). Bradburn (1969), one of the first scientists to examine the concept of psychological well-being, adopted a eudaimonic perspective and conceptualized the concept as the prevalence of situations in which individuals experience satisfaction greater than the circumstances in which they experience disappointment. Huppert (2009) defined psychological well-being as the state in which life is on a positive trajectory. It involves both experiencing positive emotions and effectively navigating life’s challenges. Sustainable well-being does not necessitate individuals to be in a constant state of happiness; encountering difficult emotions like disappointment, failure, or grief is a natural aspect of life, and the ability to effectively cope with these negative or painful emotions is crucial for enduring well-being. With the PERMA model, Seligman (2011) proposed that flourishing is achieved through the interplay of five essential components of well-being: Positive emotions, engagement, relationships, meaning, and accomplishment. Ryff (1989) has put forward a more comprehensive psychological well-being model consisting of six components: Self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy (Ryff, 1989, 1995; Ryff & Singer, 2008). *Autonomy* involves the ability to assess oneself based on personal standards rather than seeking external approval. *Environmental mastery* entails the capacity to select and establish environments that cater to individual needs. *Personal growth* encompasses an openness to novel experiences and the perception of oneself as evolving and expanding over time. *Positive relations with others* revolve around fostering warm and trusting interactions, displaying empathy, affection, and intimacy. *Purpose in life* encompasses the cultivation of goals, intentions, and a sense of direction, contributing to a profound sense of life's meaning. *Self-acceptance* involves the ability to appraise oneself and one's past life in a positive light, while acknowledging both positive and negative attributes within oneself (Ryff, 1989; 1995). According to Ryff (1989), each facet represents distinct challenges that individuals encounter in their pursuit of positive functioning. The present study addressed psychological well-being based on Ryff’s perspective.

In the existing literature, there are several factors in relevant to psychological well-being. For instance, recent research showed that psychological well-being is associated with self-esteem, self-efficacy, quality of family relationships, social support (DeNeve & Cooper, 1998; Iraz et al., 2021), egotism, self-interest (Bauer & Wayment, 2008), gratitude (Emmons & McCullough, 2003), quite ego (Liu et al., 2022; Niemic et al., 2008; Wayment & Bauer, 2018; Wayment et al., 2015), mindfulness (Baer et al., 2008; Brown et al., 2007; Hamarta et al., 2013; Howell et al., 2008), active participation in leisure activities (Sacker & Cable, 2006), emotional intelligence (Deniz et al., 2017), cognitive flexibility (Fu & Chow, 2016) etc. The current study focused on two variables that have the potential to be related to psychological well-being among college students: Positive future expectations and quiet ego.

Positive Future Expectations

In the extant literature future expectations are conceptualized as the perceptions that individuals create about themselves based on their experiences in their past lives (Rotter, 1975). The individuals' perspectives on the future, that is, whether they have positive or negative expectations about the future, have significant importance in their life journey, as the image that they form of themselves in the future serves as a model that drives their behavior and focuses their efforts on a specific goal (Nurmi, 1991, 1993). An individual who possesses an optimistic perspective characterized by hope and optimism has a tendency to take on a more positive and consistent endeavor in achieving his or her goals (Scheier & Carver, 1985; Snyder et al., 1991). Recent research findings have shown that individuals with positive future expectations exhibit heightened levels of hope, optimism, and overall happiness. Moreover, holding positive future expectations tends to favorably impact one's overall well-being and ability to adapt to his or her chosen career path (Doğan, 2006; Eryılmaz 2011; Karakoç et al., 2013; Şimsek, 2012; Taş & Özmen, 2019; Toker & Kalıpçı, 2021). Furthermore, in a study conducted by Ehtiyar et al. (2017), it was found a positive significant relationship between college students' attitudes towards the future, positive future expectations and psychological well-being, and that positive future expectations affect psychological well-being more than attitudes towards the future. In another study on young people's perceptions of the future, the results revealed that future expectation is linked to three basic processes: Motivation, planning and evaluation. Also, it was found that young people's goals and interests are often linked to late adolescence and early adulthood developmental tasks (Seginer, 2003). It seems that young people who have a positive outlook despite difficult conditions have the ability to create their own life plans and determine the path to success thanks to their success (Walsh, 1996). The present study aimed to examine the direct and indirect effects of positive future expectations on the psychological well-being of college students.

Quiet Ego

Quiet ego is described as "a self-identity that is not excessively self-focused but also not the excessively other-focused-an identity that incorporates others without losing the self" in extent literature (Bauer & Wayment, 2008, p. 8). It refers to the problematic aspects of excessive self-interest (e.g., egotism and narcissism) and noisy ego (Wayment et al., 2015). Thus, the quiet ego provides a backdrop for hearing the voices of others (Bauer & Wayment, 2008) and treating them with compassion (Wayment et al., 2015). It also contributes to the growth of the self and others (Wayment & Bauer, 2018) by balancing the needs and aspirations of the self and the others and creating internal and social harmony (Bauer & Wayment, 2008; Wayment & Bauer, 2018; Wayment et al., 2015). Besides that, it activates the sense of being a part of a more significant meaning and picture (Kesebir, 2014).

According to Wayment et al. (2015), the concept of the quiet ego consists of four components, namely detached awareness, inclusive identity, perspective-taking, and growth, which are founded on two main orientations, balance and growth. *Detached awareness* is about an individual's appreciating the value of the moment in a non-judgmental awareness (Wayment et al., 2015), approaching things from a mental distance (Liu et al., 2021; 2022), accepting themselves with their positive and negative aspects with a non-defensive attitude (Brown & Ryan, 2003; Wayment et al., 2015). It is mainly related to growth orientation (Wayment & Bauer, 2018). *Inclusive identity* refers to including others in personal space in a non-defensive manner (Liu et al., 2022) and is related to being open to cooperating with them. It is mainly relevant to balance orientation (Wayment & Bauer, 2018). *Perspective-taking* is associated with the ability to understand and espouse the perspectives of others (Davis, 1983; Liu et al., 2021). It is relevant to balance orientation (Liu et al., 2022; Wayment & Bauer, 2018). *Growth* refers to the experiential and reflective motivation for personal growth (Bauer et al., 2015) and it is related to growth orientation (Wayment & Bauer, 2018).

Research has shown that the quiet ego is positively associated with various variables such as values, including well-being (especially eudaimonic well-being) (Bauer & Wayment, 2008; Wayment & Bauer, 2017; Liu et al., 2022; Niemic et al., 2008; Wayment & Bauer, 2018; Wayment et al., 2015), meaning of life (Bauer & Wayment, 2008; Wayment & Bauer 2017; Liu et al., 2022; Steger et al., 2006), compassionate goals, self-control (Wayment et al., 2015, 2016), mindfulness (Heppner & Kernis, 2007), universalism, benevolence, and self-direction (Wayment & Bauer, 2008). Additionally, it provides a backdrop for building a sense of self-concept suited to subjective well-being (Gilbert, 2009). The present study aimed to examine the direct and indirect effects of positive future expectations on the psychological well-being of college students through quiet ego.

Method

Model

This study was methodologically designed as correlational research. According to Creswell (2011, p. 340), correlational research can be categorized into two primary types, namely explanatory research design and prediction research design. The prediction research design is used “to identify variables that will predict an outcome or criterion” (Creswell, 2011, p. 341). The present study employed the prediction research design. The outcome variable in this study was psychological well-being, whereas the predictor variables were positive future expectations and quiet ego.

Sample and Population

The study sample comprised 250 undergraduate students (176 females, 74 males) in Istanbul. The participants’ ages ranged from 18 to 25, with a mean age of 20.55 (*SD* = 2.37). The sample consisted of 7.2% prep class students, 40.0% first-year students, 26.0% second-year students, 16.4% third-year students, and 10.4% fourth-year students. The predominant family structure observed within the sample was that of nuclear families (89.6%). The family structure of 10.4% of the participants was extended family. The socioeconomic status of 29.2% of the sample was low, 57.2% was middle, and 13.6% was high.

Data Collection Tools

Participants completed four instruments: The Positive Future Expectation Scale, The Quiet Ego Scale (QES), The Flourishing Scale, and personal information form.

Quiet Ego Scale (QES). The QES is a scale developed by Wayment et al. (2015) to measure the psychological characteristics of the quiet ego, including detached awareness (e.g., “I do jobs or tasks automatically, without being aware of what I’m doing.”), inclusive identity (e.g., "I feel a connection with strangers."), perspective-taking (e.g., "Before criticizing somebody, I try to imagine how I would feel if I were in their place."), and growth (e.g., "For me, life has been a continuous process of learning, changing, and growth."). It consists of fourteen items on a 5-point Likert-type scale (*1 = strongly disagree; 5 = strongly agree*). It has five reverse items. Higher scores indicate a greater degree of quiet ego characteristics. The original scale development study found Cronbach's alpha value as .75 (Wayment et al., 2015). The study on Turkish adaption was carried out by Akça (2014) and Cronbach's alpha value was found as .70. In the current study, McDonald's Omega (ω) was calculated as .73.

Positive Future Expectations Scale. The Positive Future Expectations Scale consisting of 5 items (e.g., "I am very optimistic about my personal future.") rated on a 5-point Likert-type scale (*1 = strongly disagree; 5 = strongly agree*), was developed by Imamoglu (2001) to measure the extent to which individuals have positive expectations about their personal future. Higher scores on the scale indicate positive expectations for the future. One of the items was reversed. The alpha reliability coefficient of the scale was reported as .85 (Imamoglu, 2001; Imamoglu & Guler-Edwards, 2007) in the original study. In the present study, McDonald's Omega (ω) was found as .93.

Flourishing Scale. The Flourishing Scale developed by Diener et al. (2009) consists of eight items (e.g., "I lead a purposeful and meaningful life.", "I actively contribute to the happiness and well-being of others.") rated on a 7-point Likert-type scale (*1 = strongly disagree; 7 = strongly agree*). The scale assesses the degree of socio-psychological well-being of individuals. Higher scale scores imply greater socio-psychological well-being. In the original study, Cronbach's alpha value was found as .87. In the Turkish adaptation study, Cronbach's alpha value was calculated as .80, and test-retest reliability was .86 (Telef, 2013). In the current study, McDonald's Omega (ω) was calculated as .88.

The Personal Information Form. Participants' demographic information, including age, sex, family structure, grade, and socioeconomic status, was asked through the personal information form.

Collection of Data and Analysis

The data was collected after receiving approval from the Institutional Review Board (IRB). Participants were informed about the aim of the study through the Informed Consent Form, and they got involved in the study voluntarily after signing this form—the survey package composed of a personal information form and three scales. Participants completed the package of instruments during classes, and this procedure took approximately 15 minutes. At the end of the data collection process, the participants were thanked for their participation.

In the data analysis part, initially, the standard z values ranging from -3 to +3 were employed to identify extreme values in the univariate dataset. Additionally, the kurtosis and skewness coefficient values of +1 and -1, respectively, were utilized in this determination. Following the assessment of univariate and multivariate normality, a total of 12 replies were excluded from the dataset. Subsequently, the remaining data from 250 students were utilized for further analysis. Next, Pearson product-moment correlation coefficient was run to investigate the relationships among study variables with SPSS for Windows 25.0. Then, the mediation analysis was performed via the PROCESS module (Model 4), developed by Hayes (2013). Mediation analysis is a statistical technique that examines the relationship between X and Y, specifically focusing on how X influences Y (Hayes & Rockwood, 2017). It provides valuable insights and inferences on the mechanism via which X affects Y. Mediation hypotheses serve to explain the relationship between an antecedent variable (X) and an outcome variable (Y) by examining the influence of one or more intervening variables or mediators (M) (Preacher & Hayes, 2008).

In the mediation analysis, the bootstrap approach (with n = 5000 resamples and 95% confidence intervals) was used. The lack of a “0” value between the lower (BootLLCI) and upper (BootULCI) bootstrap values was accepted as evidence of the mediator variable’s statistical significance, as stated by Hayes (2018). All values were reported as the unstandardized regression coefficients (with the symbol B), as Hayes (2013) recommended.

Compliance with Ethical Standard

The research followed the institutional and/or national research committee's ethical standards and the 1964 Helsinki declaration and its later revisions or equivalent ethical standards. The data was gathered after approval from the Institutional Review Board (IRB) of Istanbul 29 Mayis University (Date: 09/04/2023 No: 2023/09-2).

Findings

Preliminary Bivariate Analyses

Descriptive statistics and bivariate correlations among study variables are given in Table 1. As can be seen in Table 1, quiet ego (r = .31, p < .01) and psychological well-being (r = .65, p < .01) were positively correlated with positive future expectations. In addition, quiet ego (r = .47, p < .01) was positively related to psychological well-being. These values have provided evidence that quiet ego has a positive correlation with both positive future expectations and psychological well-being.

Table 1

The Descriptive Statistics and Correlations among the Study Variables for Study

	1.	**2.**	**3.**
1. Positive future expectations	-		
2. Quiet ego	.31**	-	
3. Psychological well-being	.65**	.47**	-
Mean	3.47	3.40	5.02
Standard deviation	1.06	.45	.12
Skewness	-.60	-.28	-.68
Kurtosis	-.30	.15	.38

** p < .01

Mediation Analysis

In this study, the associations among three variables, positive future expectation, quiet ego, and psychological well-being, were investigated. It was hypothesized that quiet ego (M) would have a mediatory role on the relationship between positive future expectation (X) and psychological well-being (Y). The positive future expectation was entered into the model as the predictor, quiet ego as the mediator, and psychological well-being as the dependent variable.

According to the results of mediation analysis, positive future expectation was positively associated with quiet ego (B = .13, SE = .03, t = 5.19 p < .01, 95% CI [.08, .18]). Quiet ego was positively related to psychological well-being (B = .73, SE = .12, t = 6.19 p < .01, 95% CI [.50, .97]). Positive future expectation was positively associated with psychological well-being both in the absence (B = .69, SE = .05, t = 13.42 p < .01, 95% CI [.59, 79]) and presence of the mediator variable (B = .59, SE = .05, t = 11.74 p < .01, 95% CI

[.49, 69]). That is, upon the inclusion of the quiet ego, which serves as the mediator variable, into the model, a notable decrease was observed in the effect of positive future expectation on psychological well-being. The mediatory effect of quiet ego in explaining the association between positive future expectation and psychological well-being was statistically significant, B = .10, SE = .05, 95% CI [.05, .16] since there is no "0" between lower (BootLLCI) and upper (BootULCI) bootstrap values. Therefore, it may be concluded that the concept of quiet ego serves as a partial mediator in the association between positive future expectations and psychological well-being. The full model explained 50% (R^2 = .50) of the variance in psychological well-being. The results of mediation and bootstrapping analyses are presented in Table 2 and Table 3, and the standardized path coefficients are demonstrated in Figure 1.

Table 2

The Results of Mediation Analysis

	Outcome Variables					
	M (Quiet ego)			Y (Psychological well-being)		
Antecedent variables		*B*	*SE*		*B*	*SE*
X (Positive future expectations)	*a*	.13**	.03	*c'*	.59**	.05
M (Quiet ego)	-	-	-	*b*	.73**	.12
Constant	l_M	2.93**	.09	l_Y	.49**	.39
	R^2 = .10 $F(1; 248) = 26.90; p < .01$			R^2 = .50 $F(2; 247) = 122.81; p < .01$		

** $p < .01$

Table 3

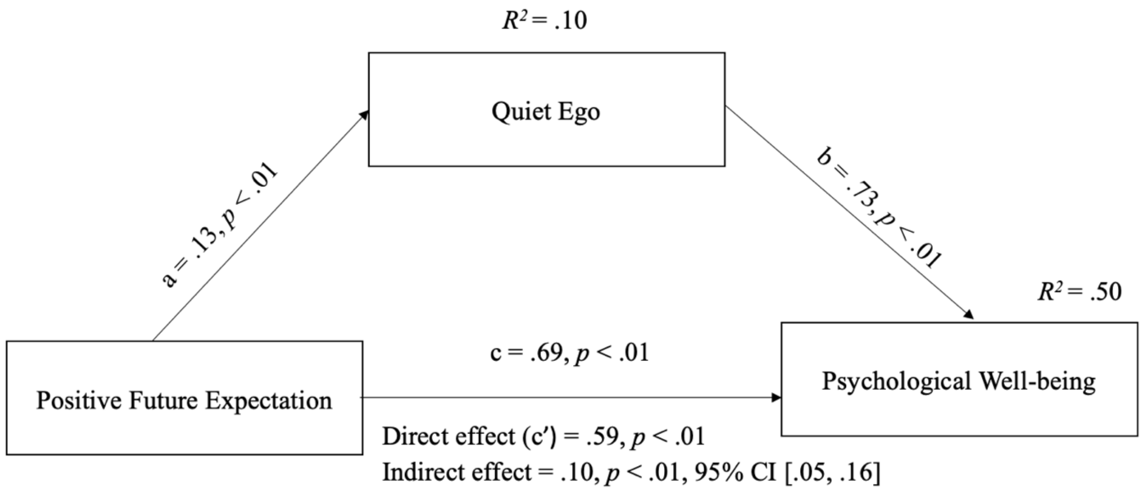
The Results of Bootstrapping Analysis

Effects	Coeff. B	Standard Dev.	t	*p*	Bootstrapping Lower Limit	Bootstrapping Upper Limit
Total Effect	.69	.05	13.42	.000	.59	.79
Direct Effect	.59	.05	11.74	.000	.49	.69
Indirect Effect (X → M → Y)	.10	.05			.05	.16

Note. X = Positive future expectations, Y = Psychological well-being, M = Quiet ego

Figure 1

The Direct and Indirect Effects of Positive Future Expectation on Psychological Well-Being Through Quiet Ego



Discussion and Results

This study focused on the associations between positive future expectations, quiet ego, and psychological well-being among college students in Turkey. It was hypothesized that there would be direct and indirect effects of positive future expectations on psychological well-being through quiet ego. The study contributed to the expansion of the psychological well-being literature by focusing on two variables, positive future expectations and quiet ego, whose relationship with psychological well-being has been relatively little studied.

According to the results, positive future expectation has a direct effect on psychological well-being. This finding is consistent with the existing body of scholarly works. For instance, the findings of a study conducted by Çalışkan and Dilmaç (2021) have indicated that positive future expectation is one of the predictors of psychological well-being. Positive future expectation implies a disposition toward the future characterized by feeling optimistic and a lack of excessive anxiety (Imamoglu & Guler-Edwards, 2007). In the study conducted by Ehtiyar et al. (2017), it was found that there was a positive significant relationship between college students' attitudes towards the future, positive future expectations and psychological well-being, and that positive future expectations affected psychological well-being more than attitudes towards the future. Doğan (2006), in his research on college students, has found that as students' thoughts about the future become more positive, their well-being levels increase.

Weiss and Cropanzano (1996) stated that positive feelings reduce stress, depression, and hopelessness, and positively affect well-being. In parallel with these findings, the results of this study indicated that as students' thoughts about the future become more positive, their psychological well-being also increases.

The mediation analysis confirmed that quiet ego mediates the relationship between positive future expectations and psychological well-being. While previous studies have shown the link between quiet ego and psychological well-being (Bauer & Wayment, 2008; Wayment & Bauer, 2017; Liu et al., 2022; Niemic et al., 2008), there is no evidence in the literature regarding the relationship between the quiet ego and positive future expectations. In fact, quiet ego is a concept that has a relationship with time due to detached awareness, which is one of its components. Detached awareness is a state of consciousness characterized by being fully present and receptive. Being in detached awareness allows individuals to observe their actions in a non-judgmental attitude in the here-and-now, and achieve long-term personal growth and well-being, as suggested by Bauer and Wayment (2008) and Niemiec et al. (2008). The present is not detached from the past or the future, that is, the present is heavily influenced by individuals' past experiences and aspirations for the future (Verdugo & Sanzhez-Sandoval, 2022). In particular, the mental picture that individuals will form about themselves in the future serves as a framework that guides their actions and motivates them to take certain actions. (Nurmi, 1991, 1993). The emphasis of quiet ego on long-term growth improves psychological well-being by allowing individuals to place their activities into a larger and long-term context, fostering their sense of purpose and personal growth over time (Bauer & Wayment, 2008; Liu et al., 2022; Niemiec et al. 2008). This long-term orientation that comes with detached awareness shifts the focus of self-evaluation from the present circumstance to a long-term situation. It protects the individuals from negative emotions and internal conflicts by keeping them from processing information about themselves in an overly defensive and pessimistic manner (Bauer & Wayment, 2008; Liu et al., 2022). In addition, the research indicating the relationship between the quiet ego and self-concept clarity, which refers to the degree to which one's ideas about oneself are clearly and securely defined, internally consistent, and temporally stable (Campbell et al., 1996) also supports the quiet ego's association with positive future expectations. Similar to positive future prospects, quiet ego plays a role in shaping a prospective self-concept.

Although the study has notable strengths, it is important to acknowledge the presence of some limitations as well. First, this study was conducted with college students aged 18-25.

For this reason, it is not possible to generalize about other samples. Conducting research with participants of varied ages and levels of education would provide significant insight into the relationships between study factors, thereby contributing to the progress of future research. Second, due to the nature of this study being structured as correlational research, it is unable to provide light on the causal linkages that exist between the variables. In future study, the use of experimental methodologies will help to understand how causality works. Third, as this study was designed cross-sectionally, future studies need to be conducted longitudinally to explore the effect of the quiet ego and positive future expectation on psychological well-being in the long term. This kind of effort may contribute to understanding the long-term effects of the quiet ego on these factors. Fourth, in the present study, it was solely focused on the mediatory role of quiet ego in the relationship between positive future expectations and psychological well-being. Future research may examine other psychological factors to better understand the dynamics of the relationship between positive future expectations and psychological well-being. For example, psychological structures such as self-esteem, emotional intelligence, and stress management can be addressed. Finally, psychological well-being and future expectations can be affected by cultural differences. For this reason, future research that examines cross-cultural differences in terms of research variables will contribute to the body of knowledge. Notwithstanding the limitations, the findings of the current study have several implications for both research and practical applications.

Recommendations

The findings of the current study have some implications that point to the importance of psychological counseling services to be carried out in college environments. College years are a special period in an individual's life. A significant proportion of the student population consists of individuals in their early years of adulthood and experiencing their first period of independence away from their familial environment. Throughout these years, they encounter challenges and circumstances that negatively impact their mental health and overall well-being. Thus, college counseling services are essential to support students in resolving challenges they may face and enhancing their overall well-being (Brunt, 2010). According to results of this study, it is important for counselors and other professionals working in college contexts to develop and conduct campus-based intervention programs to enhance college students' quiet ego, positive future expectations, and psychological well-being. Enhancing these psychological constructs in individual and group settings might be beneficial, particularly for senior students experiencing career planning concerns, while providing counseling services at the university level.

Compliance with Ethical Standard

The research followed the institutional and/or national research committee's ethical standards and the 1964 Helsinki declaration and its later revisions or equivalent ethical standards. The data was gathered after approval from the Institutional Review Board (IRB) of Istanbul 29 Mayis University (Date: 09/04/2023 No: 2023/09-2).

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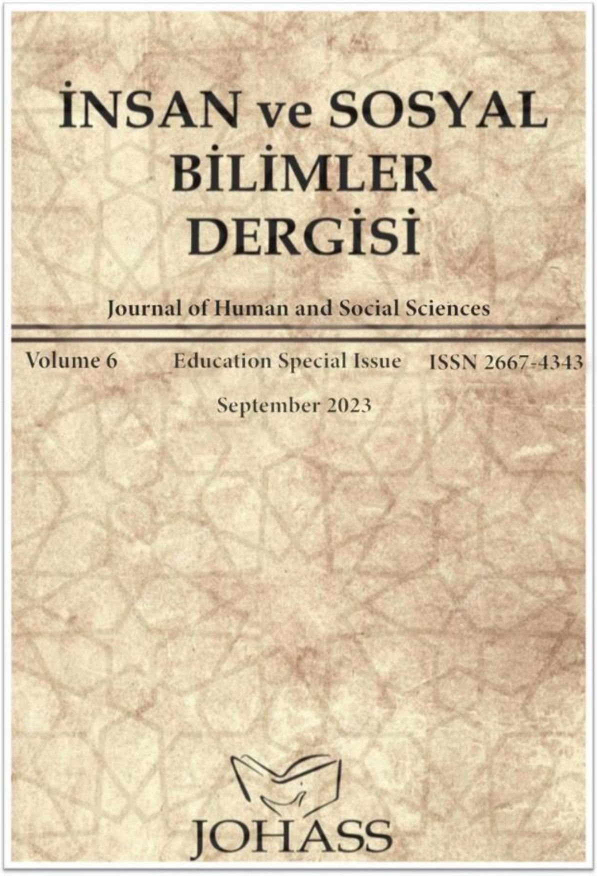

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Pre-Service Science Teachers' Understanding of Infinity Concept: The Case of Image on Convex Lens

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Pre-Service Science Teachers' Understanding of Infinity Concept: The Case of Image on Convex Lens

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Abstract

In this study, pre-service science teachers' definitions of the concept of infinity were tried to be revealed and their understanding of the concept was tried to be examined through the image formation experiment in a convex lens. The study was conducted with 31 pre-service science teachers studying in the 3rd year of science teaching at a state university. Two separate scales were used as data collection tools in the research. The scales consist of open-ended questions designed to reveal pre-service teachers' definitions of the concept of infinity and to evaluate their knowledge about image formation and image properties in convex lenses in this context. One of the scales (Scale-1) was applied before the image formation demonstration experiment in the convex lens, and the other (Scale-2) was applied after the application. The data obtained from the scales were analyzed using the descriptive analysis technique. Pre-service science teachers' definitions of infinity were grouped under three themes: general, mathematical and physical. Pre-service teachers mostly define and understand infinity with codes such as "unknown, undetectable, unmeasurable, undetectable, inexplicable, incomprehensible "under the "general" theme which includes the sub-themes of "unknown" and "having no end". This understanding of the prospective teachers leads them to the misunderstanding that the image of the object at infinity in the focal point of the convex lens is virtual and cannot be seen.

Keywords: Science education, infinity, image in optics

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Introduction

The concept of infinity has an important place in different disciplines and fields of education, and many studies have been conducted on students' understanding of infinity. These studies, conducted in different disciplines such as mathematics, philosophy, psychology and cognitive sciences, aim to investigate how students perceive, understand and learn the concept of infinity (Brieger, 2022; İşleyen, 2013; Singer & Voica, 2010; Howes & Rosenthal, 2001; Monaghan, 2001). Research examining issues such as comprehension strategies, mental processes, misconceptions and learning difficulties related to the concept of infinity is important to assist learning-teaching processes. It is necessary for students to develop their mental models in the process of learning the concept of infinity and to express these models with their own perception and understanding in order for them to learn meaningfully and fully. For example, in a study conducted with children aged 8-12, Smith, Solomon, and Carey (2005) found a high level of consistency between children's thoughts about the infinite divisibility of weight and the infinite divisibility of numbers. There are multiple, two-way interactions between number and matter domains as children develop their understanding of rational number and the continuity of matter, space, and weight (Singer & Voica, 2010). On the other hand, there are also studies conducted with teachers. Palamioti and Zachariades (2022), examine how different contexts affect secondary school mathematics teachers' understanding of infinity through participation in tasks in different contexts. It is stated that the context affects secondary school mathematics teachers' concepts of infinity and allows teachers' misconceptions to emerge.

Studies on students' understanding of infinity play an important role in improving mathematics education and developing students' mathematical thinking skills (Yıldız & Körpeoğlu, 2018). How students solve a mathematical problem and how they take the intellectual steps in the solution process has also been the subject of research. The concept of infinity is a subject addressed in disciplines such as mathematics and philosophy, and these disciplines also have an important place in the field of education. Some studies on the concept of infinity in different fields examine how the concept is perceived and the effects of this concept on the human mind:

1. Infinity in mathematics education: In mathematics education, the concept of infinity is taught especially in advanced mathematics courses such as number theory, analysis and geometry. In these lessons, the concept of infinity is

associated with topics such as the classification of numbers, infinite series and limits (Oflaz & Polat, 2022; Krátká, Eisenmann & Cihlář, 2021; Fernández-Plaza & Simpson, 2016; Merand, 2014; Fischbein, Tirosh, & Hess 1979).

2. In the field of philosophy , the concept of infinity is discussed in disciplines such as philosophy of religion and philosophy of existence, as well as subjects such as metaphysics, epistemology and logic (Başaran, 2016; Türkmen, 2014). Students can improve their intellectual skills by examining philosophical discussions on the concept of infinity.
3. Infinity in psychology education: The concept of infinity in the field of psychology is especially researched in fields such as cognitive psychology and developmental psychology (Oflaz & Polat, 2022) . These studies are carried out to understand how students perceive, understand and learn the concept of infinity.
4. Infinity in computer science education: In computer science education, the concept of infinity is important, especially in fields such as algorithms, computational theory, and artificial intelligence. In these courses, students can improve their problem-solving skills by using the concept of infinity (Oflaz & Polat, 2022).

In mathematics courses, the concept of infinity is especially researched by mathematicians in different topics such as number theory, analysis and topology (Savuran & Isiksal- Bostan, 2022; Çelik & Akşan, 2013; Kolar & Cadez, 2012; Dede & Soybaş, 2011; Tsamir, 2002; Tirosh, 1999).

Studies on the concept of infinity are also carried out in physics and science courses (Suárez et al . 2021; Arabacıoğlu, Oğuz-Unver & Unver, 2014). Scientists such as Albert Einstein, Stephen Hawking, Richard Feynman, Steven Weinberg, Brian Greene, Lisa Randall, Roger Penrose should be mentioned as some of the leading names working on the concept of infinity in the field of physics. Especially in fields such as cosmology, astrophysics, thermodynamics, mechanics and electricity-magnetism, the concept of infinity has an important place and helps students understand these subjects. In physics and science courses, the concept of infinity plays an important role in the specific topics of the disciplines and helps students understand these topics.

In physics and science courses, particularly theoretical physicists, astrophysicists, thermodynamicists, and cosmologists are interested in researching and teaching students the concept of infinity. For example, in cosmology and astrophysics courses, students learn about topics such as whether the universe is infinite or has a finite size, and the rate of expansion of the universe. These topics provide important information about the structure and nature of the universe and develop students' cosmological modeling skills. In thermodynamic courses, the concept of infinity is used to analyze the behavior of thermodynamic systems. Students learn topics such as infinite thermodynamic systems, near-infinite systems, and zero point energy. These topics are important for understanding the laws of thermodynamics. The concept of infinity is also used in mechanics and electricity-magnetism courses. For example, students learn how the concept of infinity is used in topics such as quantum mechanics and special relativity. These courses develop students' mathematical modeling and calculation skills.

In physics courses in electircity at the undergraduate level of science, when calculating the electric field intensity occurring at a very close or a far away point to a charged region in some cases, length, surface or volume regions such as an infinitely long charged rod, an infinitely large thin plate or an infinitely large sphere are defined. In some cases infinitely small length, surface or volume elements are defined. Total intensity calculations for the entire line, surface or volume by defining the unit intensity on the volume element are included in the course content. In this or similar cases, if the student does not understand or cannot understand the infinite definitions or cases in optics, mechanics, electricity and magnetism, it will be difficult for them to understand and comprehend the problem situation. Some students may be at lower levels in terms of the ability to carry out algebraic or geometric operations related to the solution of a physics problem, but understanding the problem situation and visualizing it in the mind with mental design is a behavior expected from students who have successfully taken the general mathematics and physics courses. A mathematically literate student who has taken general mathematics I-II and general physics I-II courses should be able to understand the typical and characteristic problem situations of physics course subjects and put forward the necessary analyses. However, it is a known fact that students' success in science and mathematics courses, from primary school to university, is generally not at the desired level. Not being able to understand problem situations in science and mathematics classes, not being able to analyze them, not being able to make the necessary analyzes is an undesirable situation from the perspective of meaningful learning and constructivist perspectives. Therefore, in order to facilitate and deepen students' understanding of science subjects, it is necessary to make concrete determinations about the effectiveness of factors affecting perception, understanding and success in learning-teaching activities.

Although the 5th unit of the 7th grade of the science curriculum (MEB, 2018a) includes achievements regarding image formation and properties in the subjects of Mirrors and Refraction of Light and Lenses, it is seen that concepts such as infinity, virtual and real images are not mentioned. Again, while the subjects related to mirrors and lenses of the 10th grade optics unit of the physics curriculum (MEB, 2018b) include the achievements related to image formation and image properties, it is seen that concepts such as infinity, virtual and real images are not mentioned. There is a relationship between image formation in a convex lens and the concept of infinity. Convex lenses are an important tool used in optics, and the focusing and image-forming properties of lenses are related to the concept of infinity.

Although the concept of infinity is not included in the primary and secondary education curriculum, it is necessary to pay attention to the information and classroom activities that will affect the development of students' understanding of this concept. Because it is accepted that this concept develops from the end of primary school and the first years of secondary school (Fischbein et al. 1979). In addition, with the development of this concept, the diversity of factors affect the conceptualisation is also emphasized (Date et al. 2017). These factors include the impact of teachers' understanding of infinity and students' previous understanding of this complex concept (Monaghan 2001). As a matter of fact, according to Montes, Carrillo and Ribeiro (2014), in terms of teacher knowledge and training, teachers should have a good level of knowledge about the stages that students need to go through to reach the understanding of infinity, because this will enable them to respond appropriately to students' questions, to better choose and organize classroom activities, will provide their analysis and ranking. In addition to understanding the developmental aspects of understanding the concept of infinity; teachers must also know how to introduce the concept to their classrooms in a way that does not restrict their students' development (Montes et al., 2014).

In geometric optics, the concept of infinity is associated with certain situations related to image formation in a convex lens, stating that the image is infinitely distant. A convex lens has the feature of focusing parallel rays by combining them at a point. The light rays come from the infinite object, that is, the rays coming from a very distant object on the principal axis of a convex lens, are considered almost parallel to the principal axis, and the image is formed after the rays are refracted in the lens. This point is the focal point of the lens. If an object is infinitely far away, the incoming parallel rays pass through the lens and converge at the focal point of the lens. In the opposite case, that is, if the object is at the focal point, the image is formed at a distant point on the side where the rays are refracted. The image formed in this case is called the image formed at infinity. It is stated that the focal objects' image will form at infinity. Therefore, this concept is an important phenomenon used in optics and plays an important role in explaining the optical phenomena of reflection and refraction occurring in mirrors and lenses, and in the design and applications of optical systems.

In geometric optics, the concept of infinity and image formation, image properties in mirrors and lenses are important topics in the learning and teaching processes and helps students understand optical systems.

The problem statement of this study is "What is the understanding of pre-service science teachers about the concept of infinity?" In order to answer this question, answers to the following sub-problems were sought:

1. How do pre-service science teachers explain image formation at infinity and image properties (real, virtual) in a convex lens?
2. How do pre-service science teachers define the concept of infinity?

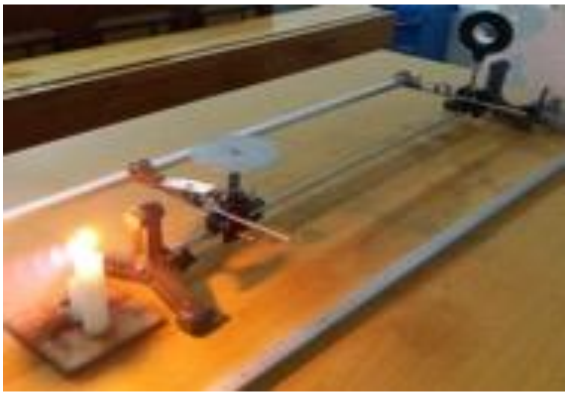
Method

Research Design

In this research, it was tried to reveal pre-service science teachers' understanding of infinity. The research was designed as a qualitative study. Pre-service science teachers were informed about the purpose and scope of the research and participation in the research was voluntary. In optics, some image states resulting from refraction and reflection are expressed with the concept of infinity. It is stated that in image formation in a convex lens, the rays coming from the focal point will proceed parallel to the principal axis after being refracted in the lens. It is also stated that the image of an object placed at the focal point on the principal axis of the convex lens will be at infinity. It is important here how the expression of infinity is understood by prospective teachers. Because correct understanding of optical events is effective in the realization of meaningful learning and the construction of knowledge. Therefore, the purpose of this research is to reveal how pre-service science teachers understand the concept of infinity. For this purpose, the image formation situation in a convex lens was used as a case study in this research. The experiment was not conducted for teaching purposes, no instructive or explanatory explanation was given, only image distances based on object distance were measured and the two measuring scale was applied to the pre-service teachers before and after the experiment. In the experimental setup, a convex lens with a focal length of 10 cm placed on the optical rail, a stand on which to place the candle used as an object, a screen on which to project the image of the candle, and a ruler were used. The burning candle was placed at certain object distances, starting from a point outside the center distance of the lens, up to the focal length, and a clear image was obtained on the screen. The object (burning candle) was placed starting from the off-center distances to the center distance, the distances between the center and the focal point, and the focal point and the point of real images formed on the screen are determined on the other side of the lens. Image distances were measured for each object distance. While the image distance was measuring when the candle (object) was at the focal point the larger, reversed and real image of the candle flame were shown. The real images on the screen on the other side of the lens were obtained at all position further a certain position when the clear image flame was begun to seen. During all these processes, no explanatory and instructive explanation of the event was included, only object and image distances were measured and data were recorded. With the help of a ruler, object distances and image distances were recorded in the table created on the board. The ruler was fixed to the optical rail, a laser (pointer) marker was used while reading the object and image distances on the ruler, and the alignments were made to coincide with the vertical center line of the lens and candle flame. The ruler used in the experiment is a standard aluminum ruler with 1 mm uncertainty. Some photos from the sample application demonstration experiment are given below.

Picture 1

The Image Position Close to the Focal Point When Object (Candle) Located Further from the Center Distance



Picture 2

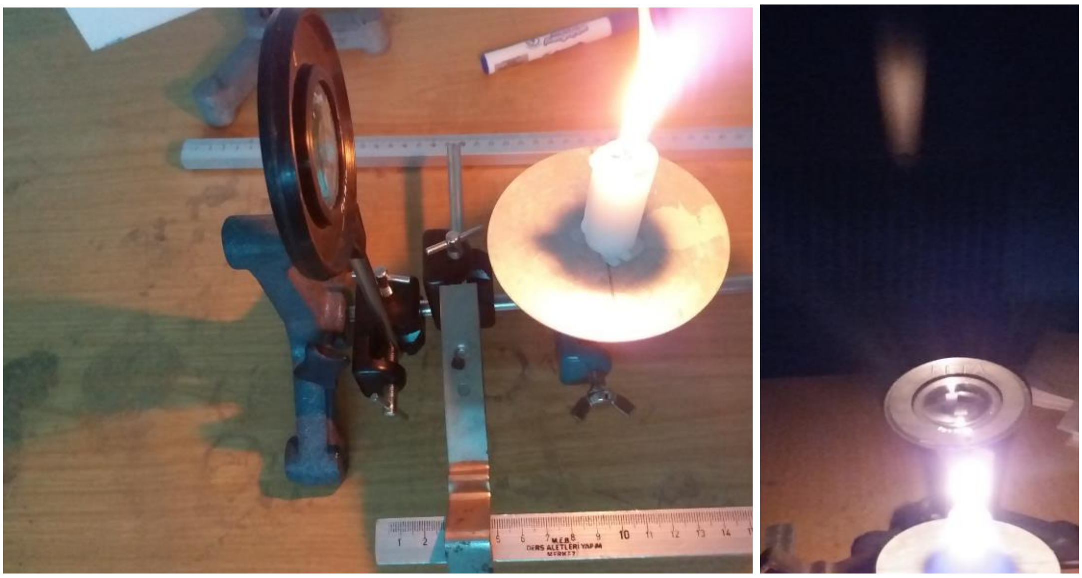
The Image Position at the Center Distance When Object Located on the Center Distance

Picture 3

The Real Image Formed When the Object is Between the Focal and The Center Point

Picture 4

The Object (Candle) Placed at The Exact Focal Point and the Real Image Reflected on the Screen at A Distance of Approximately 3 Meters (Real Images Are Available at All Position Except A Certain Distance from the Lens)



The experiment of image formation in a convex lens is included in both the secondary education curriculum and undergraduate programs. The concept of infinity, which is the subject of this research, is a concept that prospective teachers have encountered in their previous education and training processes. Two separate scales consisting of open-ended questions were prepared by the researcher in order to reveal the knowledge and understanding of prospective teachers about image formation in a convex lens and the concept of infinity. The questions in these two scales basically serve this purpose. In practice, image formation experiments were conducted on convex lenses for prospective teachers between two scales.

Study Group

In this research, participants were determined using the convenience sampling method and purposeful sampling. Convenience sampling in qualitative research is sampling conducted on volunteer individuals who are easy to reach, available, and willing to participate in the research (Christensen, Johnson, & Turner, 2015). Convenience sampling method means doing what is easy to save time, money and effort (Patton, 2014: 244). In purposeful sampling, participants are selected by the researcher according to the research problem and purpose, and the situation is examined in depth with the most suitable participants who will contribute to the research (McMillan, 2004, Patton, 2002). For this reason, while creating purposeful sampling , it was thought that it would be appropriate to determine the prospective teachers who took General Mathematics I-II, General Physics I-II -III courses and General Physics Laboratory I-II courses during their undergraduate education as the study group.

The study group of the research consists of 3rd grade students studying in the Science Teaching program of a state university in the 2021-2022 fall semester and taking the Science Teaching Laboratory Applications I course. The research was conducted with 32 students who wanted to participate in the study among 76 students who took this course. A student was removed from the study group because he/she did not submit the second scale. The study group of the research consisted of 31 pre-service science teachers.

Data Collection Tools

In the study, two scales consisting of open-ended questions created by the researcher were used as data collection tools. The 1st scale consists of five questions: two questions one which includes a drawing about image formation in a convex lens, one question about the definition of the concept of infinity, and two questions about the image formed at infinity in optics.The second scale consists of three questions: one question containing a drawing about image formation in a convex lens, one question about the definition of the concept of infinity, and one question about the image formed at infinity after the convex lens experiment. The open-ended questions used are basically questions with the same scope. A question about the image of an object in focal point of a convex lens was asked exactly before and after the experiment. The content and structure validity of the questions were provided by the opinion of an expert with a master's degree in physics education. Scales were applied to upper grade pre-service science teachers before the application.The questions were corrected in line with the feedback received on language, spelling, expression and understandability.

The open-ended questions in Scale 1 are as follows:

1. Briefly explain the location and characteristics of the image on the screen of the candle placed at a point further from the center distance of the convex lens.
2. If a burning candle is at the focal point of the same lens, draw the location and write down the features of the image of the candle. Make the necessary explanations.
3. What is infinity? Explain.

4. Is an optical image at infinity real or virtual? What do real image and virtual image mean? Explain.
5. Is an image at infinity visible in optics? Explain your answer.
6. The open-ended questions in Scale 2 are as follows:
7. If a burning candle is at the focal point of the same lens, draw the location and write down the features of the image of the candle. Make the necessary explanations.
8. Write your thoughts about the concept of infinity.
9. How do you explain the situation where the image is at infinity in optics?

Collection of Data and Analysis

The data obtained from the scales were analyzed using the descriptive analysis technique. In descriptive analysis, data are interpreted according to determined themes. Descriptive analysis aims to relate and describe themes and interpret the resulting cause-effect relationships (Yıldırım and Şimşek, 2006).

In the drawing parts of the questions involving drawings in the 1st and 2nd scales, the drawing part was evaluated as correct if the refraction of the rays, their directions and the image on the screen were drawn and displayed correctly. Explanations of the pre-service science teachers regarding these questions; They were categorized as codes consisting of the themes of image feature, image position and image status, and the codes were tabulated by giving frequencies and percentages. For the question about the definition of the concept of infinity, codes were created by reading the answers of the pre-service science teachers over and over again, and the resulting codes were categorized as sub-themes and themes. Two questions on the 1st scale and one on the 2nd scale are related to the situation of having an image at infinity, which is expressed in the image formation situations in optics. Since these questions were explanatory questions, the answers of the pre-service science teachers were grouped and coded by descriptive analysis (Tables 4, 5 and 6). Some examples selected from the the pre-service science teachers' answers are given as they are, without correcting any errors in expression, spelling, spelling and punctuation.

Compliance with Ethical Standard

In the research, all rules specified within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed. None of the actions mentioned under the heading "Actions Contrary to Scientific Research and Publication Ethics" in Article 4 of the directive have been carried out.

Name of the board that made the ethical evaluation: Marmara University Institute of Educational Sciences Research and Publication Ethics Board

Approval date and number of approvals of the evaluation decision: 22.06.2022/05-30

Issue number of the ethical evaluation document: 341245

Findings

The findings obtained in the research are included in this section.

Findings on First Sub-Problem

The findings obtained from Scale 1 and Scale 2 regarding the first sub-problem of the research are given in tables below.

The answers given by the pre-service science teachers to the first question of Scale 1, which asks about the location and image characteristics of the image of the object at a point other than the center point of the convex lens, are given as frequency and percentage in the table below with a simple descriptive analysis.

Table 1

Pre-Service Science Teachers' Answers About the Location and Characteristics of the Image of an Object Outside the Center Point of a Convex Lens

	Answers	**f**	**%**
Image Feature	Virtual	14	45
	Real	15	48
	Not Specifying Features	2	7
Image Location	Between Focus and Center	7	23
	Behind the Lens	6	19
	At Focal Point	1	3
	Image Location Not Specified	17	55
Image Status	Inverted and Small	28	90
	Inverted	3	10

According to Table 1, when we look at the answers of the pre-service teachers about the feature, location and state of the image of an object located further from the central distance of the convex lens, 45% of the pre-service teachers who participated in the research on the image feature answered as virtual, 48% as real, while 7% of the pre-service teachers did not specify any image features. 55% of the pre-service teachers did not specify the image location. 23% of the pre-service teachers stated that the image was between the focal point and the center, while 19% stated that it was only behind the lens. One pre-service teacher stated that the image would be at the focal point. Most of the pre-service teachers stated that the image would be upright down and smaller than the object. The image of an object at outside the center distance is inverted, smaller than the object, and virtual, between the center and focus in the convex lens. When we look at the accumulation of the pre-service teachers' answers, almost half of them stated the image feature incorrectly. While 90% of the the pre-service teachers stated the status of the image correctly, 55% did not specify the location of the image.

Some examples of student answers to this question are presented below:

S_1: Since the object is outside the convex lens, the image is between the focus and the center, inverted, real and its size is smaller than the size of the object.

S_2: The image is upright down, virtual and smaller in size.

S_3: The image is formed on the back. The image is virtual, inverted and small.

The answers given by the prospective teachers to the 2nd question of Scale 1, which asks about the location of the image of the object at the exact focal point of the convex lens and its image characteristics, are given as frequency and percentage in the table below.

Table 2

Pre-Service Science Teachers' Answers About the Location and Characteristics of the Image of an Object at the Focal Point of a Convex Lens

	Answers	**f**	**%**
Drawing	Correct drawing	2	7
	Wrong drawing	18	58
	No drawing	11	35
Image Feature	Virtual	6	19
	Real	6	19
	Not specifying features	19	61
Image Location	At infinity	21	68
	At focal point	1	3
	At the center	1	3
	Not specifying location	8	26

Display Status	Infinitely big	4	13
	Upright and big	2	6
	Upright and same size	4	13
	Inverted and big	6	19
	Inverted and small	2	6
	Same height	2	6
	Dot shaped	4	13
	Not stating	5	16
	No image formed	2	6

According to Table 2, when we look at the drawings and explanations of the pre-service teachers about the feature, location and situation of the image of an object at the point of the convex lens, it is seen that 58% of the drawings are wrong, 35% of the pre-service teachers did not draw, while only two pre-service teachers were able to draw correctly. In their explanations about the image feature, 19% of the pre-service teachers answered as virtual, 19% as real, while 61% did not specify the image feature. 26% of the pre-service teachers did not specify the image location. While 68% of the pre-service teachers stated that the image was at infinity, one pre-service teacher stated that it was at the focal point, and another pre-service teacher stated that it was at the center. Pre-service teachers used different expressions about the status of the image. According to the findings in Table 2, 19% of the pre-service teachers stated that the image was upright down and large, while 16% did not state this. While 13% of the pre-service science teachers stated that the image would be infinite in size, 13% stated that it would be flat and the same size, and 13% stated that it would appear as a dot, 6% of the pre-service science teachers said that the image would not be formed. In a convex lens, the image of the object at the focal point appears larger than the object and inverted at infinity. While the pre-service teachers expressed the position of the image correctly, they gave different answers about the status of the image.

Some answers given by the pre-service teachers to this question are presented below as examples:

S_1: The image is virtual. It's upright down. Its height is greater than the height of the object.

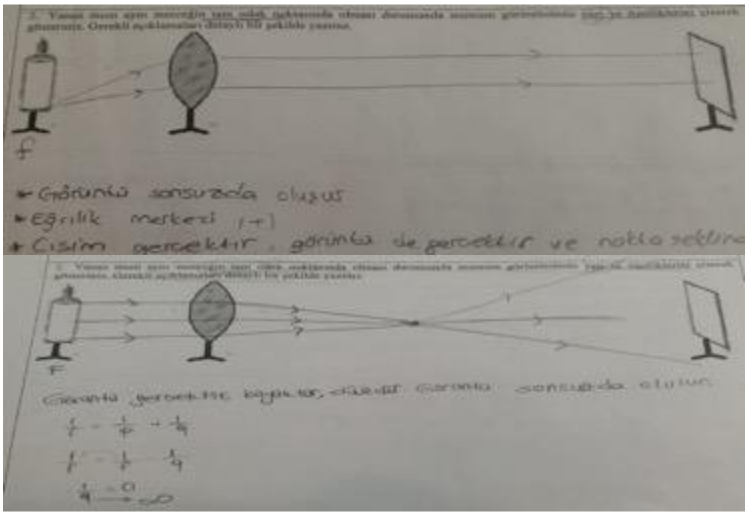
S_2: The image is inverted but larger than the object. The image location is infinite. The exact location cannot be found.

S_3: It occurs at infinity. The rays travel parallel and for this reason they do not intersect. Since they do not intersect, no image is formed.

The pre-service teachers' drawings regarding with the image of the object at the exact focal point of the convex lens contain a large number of errors. The example drawings below include two different pre-service science teachers drawings showing the refraction of the rays coming from the object at the focal point in the convex lens.

Picture 5

Examples of Pre-service Teachers' Drawings of the Image of an Object at the Focal Point of a Convex Lens



The findings of the pre-service teachers' answers to the 1st question in Scale 2 after the image formation demonstration experiment in a convex lens are given in the tables below.

Table 3

The Pre-Service Teachers' Answers About the Location and Characteristics of the Image of an Object at the Focal Point of a Convex Lens

	Answers	**f**	**%**
Drawing	Correct drawing	2	7
	Wrong drawing	20	64
	No drawing	9	29
Image Feature	Virtual	15	48
	Real	6	19
	Not specifying features	10	32
Image Location	In infinity	10	32
	At the back	5	16
	Away	5	16
	Giving distance (in metrics)	3	10
	Not specifying location	8	26
Image Status	Inverted and big	18	58
	Inverted	4	13

	Inverted and small	1	3
	Upright and small	1	3
	Same height	1	3
	Dot shaped	3	10
	Not stating	3	10

Table 3 contains the findings of the pre-service teachers' drawings and explanations about the feature, location and status of the image of an object at the focal point of the convex lens after the image formation demonstration experiment in the convex lens. The same question was asked in Scale 1 (Table 2). When the answers given by the pre-service science teachers to this question in Scale 2 (Table 3) are compared with Scale 1 (Table 2) in this section; While the rate of the pre-service science teachers who do not draw in Scale 1 is 35%, this rate is 29% in Scale 2. While the rate of the pre-service teachers' who drew incorrectly in Scale 1 was 58%, this rate was 64% in Scale 2. This increase shows that some pre-service teachers, who did not draw in Scale 1, drew in Scale 2 but they drew incorrectly. There is no difference in the proportion of the pre-service teachers who draw correctly. In terms of image feature, while the rate of the pre-service teachers who did not specify any image feature before the convex lens experiment was 61%, this rate decreased to 19% after the experiment. While the proportion of the pre-service teachers who stated that the image was real did not change, the proportion of the pre-service teachers who stated that the image was virtual increased from 19% to 48%. At this point, it can be seen that the rate of the pre-service teachers giving correct answers in terms of image features did not change, and this rate was 19% before and after the experiment. While the rate of the pre-service teachers who stated that the location of the image was at infinity before the experiment application was 68%, after the experiment application, almost half of these pre-service teachers used the expressions behind, far away for the location of the image instead of infinity, or stated that it was at a certain distance as in metrics. No difference was detected in the proportion of the pre-service teachers who did not specify their location. For the image status, after the experiment 58% of the pre-service teachers stated that the images were inverted and big while they could not answer correctly before the experiment.

Some answers given by the pre-service teachers to this question are presented below as examples:

> S_1: The image is inverted, it is behind the mirror and an apparent image is formed. As the object approaches the lens, the distance in the part where the image is clear becomes longer. The image becomes bigger.

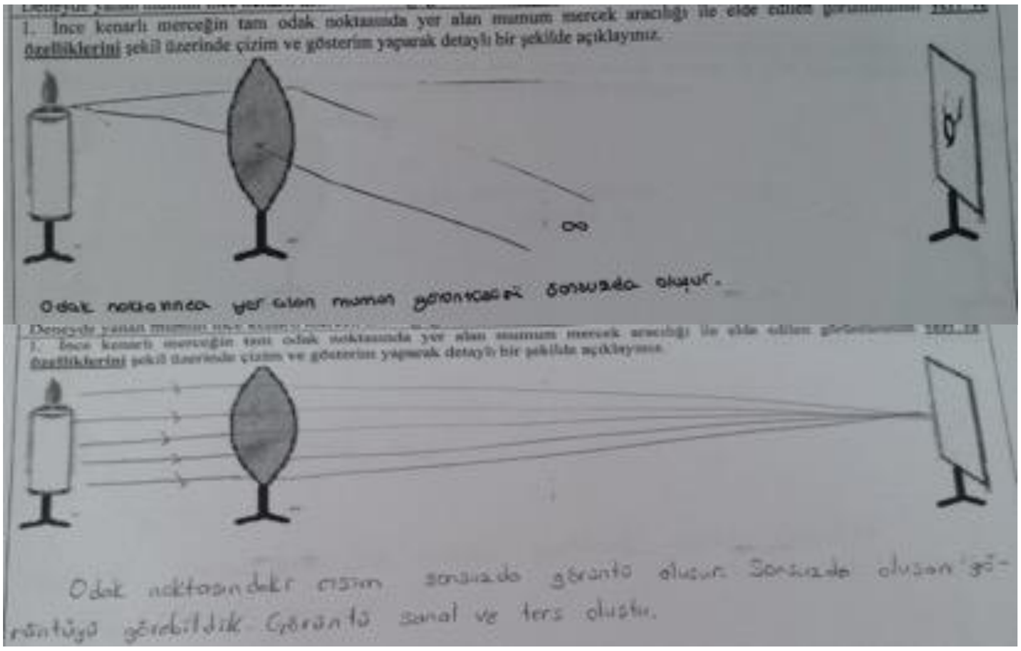
S_2: The image is formed at infinity behind the lens. We see it as a point image. The reflected rays intersect at a single point.

S_3: While the object was in focus, the image appeared very far away, quite larger than the object, and upright down. Before doing the experiment, I thought we could not see the image formed at infinity, but now I have seen what we can see.

The pre-service science teachers generally made incorrect drawings or answered the question without drawing. The sample drawings below include two different pre-service teachers drawings showing the refraction of the rays coming from the object at the focal point in the convex lens.

Picture 6

Examples of Pre-Service Teachers' Drawings of the Image of an Object at the Focal Point of a Convex Lens



The answers given by pre-service science teachers to the 4th and 5th questions in Scale 1, regarding the situation of the image being at infinity, expressed in image formation situations in optics, are grouped and the frequencies and percentages of the codes determined are given in Table 4 and Table 5.

Table 4

Explanations of the Pre-Service Teachers About the Image at Infinity and the Real-Virtual Image in Optics

	Answers	**f**	**%**
Image Feature	Virtual	15	48
	Real	6	19
	Uncertain	1	3
	Vary by optical device	9	29
Real and Virtual Image Definitions	True	12	38
	Wrong	13	41
	No answer	1	3
	Explanation with example	4	12
	Description with drawing	1	3

When Table 4 is examined, it is seen that 48% of the pre-service teachers stated that the image formed at infinity is virtual. 19% of the pre-service teachers stated that the feature of the image at infinity was real, 3% stated that it was uncertain, and 29% stated that it would vary depending on the optical device. However, while 38% of the pre-service teachers correctly identified the real and virtual image, 41% identified the real and virtual image incorrectly. It is noteworthy that although 38% of the pre-service teachers correctly stated the definition of real and virtual images, the rate of pre-service teachers who stated that the image of the object in focus at infinity in the convex lens is virtual is 48%, and the rate of pre-service teachers who say that it is real is 19%.

Some answers given by the pre-service teachers to this question are presented below as examples:

S_1: An image that exists at infinity is virtual. The real image is the image projected on the screen. What appears in optical instruments is a virtual image.

S_2: In optics, an image at infinity is virtual. The image that can be projected onto the screen with the help of rays is real. We cannot observe the virtual image in real life.

S_3: The real image is the image that cannot be seen with the eye and is formed in front of the lens used. The rays themselves intersect. The virtual image is the image that can be seen with the eye and is formed behind the lens. The reflections of the rays intersect. In order for an image to be formed at infinity, the incoming and reflected rays must not intersect. In this case, we cannot say real or virtual. The image is unclear at infinity.

Table 5

The Pre-Service Teachers' Answers on Whether the Image at Infinity Will Be Visible or Not

	Answers	**f**	**%**
Image Feature	Visible	8	26
	Invisible	17	55
	No answer	6	19

In Table 5, when the answers of the pre-service teachers about whether the image formed at infinity will be visible or not in the convex lens are examined; it is seen that 55% of the pre-service science teachers answered the question as invisible, 26% answered as visible, and 19% left the question unanswered. The explanations of the pre-service teachers who answered this question as visible include the statement that the image will be pointwise.

Some answers given by the pre-service teachers to this question are presented below as examples:

S_1 : I think the image will not appear. (May appear as dots)

S_2 : The image formed at infinity is not visible. The image will be very small and spotty so it won't be visible.

S_3 : Since the rays will not intersect, no image will be visible to the eye.

The findings of the answers given by the pre-service teachers to the 3rd question in Scale 2 after the image formation demonstration experiment in the convex lens are given in the table below.

Table 6

Explanations of The Pre-Service Teachers About the Image at Infinity in Optics

	Answers	**f**	**%**
Image Feature	Visible	13	42
	Invisible	3	10
	Other explanations that are not explicitly stated	15	48

Table 6 , 42% of pre-service science teachers state that the image at infinity can be seen after the experiment. While 10% of the pre-service teachers stated that the image at infinity would not be visible, 48% of them made unclear statements about whether it would be visible or not. Some example expressions are given below.

S_1 : Uncertainty arises in the formation of images at infinity. I thought that the image could not be observed at infinity, but after the experiment, I saw that we could see it.

S_2 : While there will be no image at infinity and there is undetectable, endless perception. In the last experiment, the formation of an image of the object in focus made us wonder whether some perceptions were wrong.

S_3 : Since the image is formed outside the center, an infinite image is formed.

Findings on Second Sub-Problem

The findings obtained from Scale 1 and Scale 2 regarding the second sub-problem of the research are given below in tables.

In order to reveal the pre-service science teachers' understanding of the concept of infinity, the answers given by the the pre-service teacher to the 3rd question of Scale 1, where the conceptual definition is asked, are described and the codes identified and the sub-themes and themes formed by the codes are presented in the table below.

Table 7

The Pre-Service Teachers' Understanding of the Concept of Infinity

Codes	Sub-themes	Themes
Unknown Can't find value Unimaginable Imperceptible multitude Undefined Theoric	Unknown	General
Endless Uncertain ending Endless Without beginning or end Unending Without limit Continually	Having no end	
Infinite number between two numbers Space between numbers That cannot be expressed in numbers	Numerical value	Mathematical
The farthest point of the image The rays do not intersect Rays are parallel When p=q A concept in optics	Distance in optics	Physical
Distance beyond sight The farthest point you can go Unpredictable distance The farthest place	Distance	

When we look at the descriptive analysis of pre-service science teachers' definitions of the concept of infinity in Table 7, it is seen that the definitions are mostly expressed with codes belonging to the sub-themes of "unknown" and "having no end" under the "general" theme. The pre-service science teachers express the concept of infinity under the sub-theme of "unknown" and "having no end" with codes such as unknown, undetectable, undefined, unvalued, endless, unending, endless, limitless, continuous.

Some of the pre-service science teachers made definitions with codes such as infinite number between two numbers, space between two numbers, and cannot be expressed with numbers, which constitute the "mathematical" theme and "numerical value" sub-theme.

On the other hand , some of the pre-service science teachers they tried to define the concept of infinity with codes such as the farthest point of the image, the rays not intersecting, and the rays being parallel, which constitute the sub-theme of "distance in optics", which is discussed under the "physical" theme.

In addition, some of the pre-service science teachers also used codes such as the farthest point that can be reached, unpredictable distance, and the farthest place, which belong to the "distance" sub-theme expressed by the "physical" theme in their definitions.

Some answers given by the pre-service teachers to this question are presented below as examples:

S_1: It is undefined. Endless repetition or the unknown.

S_2: It is the continuous continuation of a situation or event.

S_3: Infinity is the space between one of the objects, numbers, concepts and the one immediately behind it. There are infinite numbers between 1 and 2. But there are also infinite numbers between 1,5 and 1,7. Infinity may be greater than some infinities. Things that have no beginning or end. (It should not be thought of as just numbers.)

The findings of the answers given by the prospective teachers to the second question in Scale 2 after the image formation demonstration experiment in the convex lens are given in the tables below.

Table 8

The Pre-Service Teachers' Understandings About the Concept of Infinity After the Experiment

Codes	**Sub-themes**	**Themes**
Incomprehensible	Unknown	General

Known but unobtainable Including everything, every possibility Unexplained things Alternative concept for unexplained things in the Universe Depends on personal perception Imperceptible multiplicity Uncertain, unknown Nonexistent		
Endless Continuity of the event or situation Always ahead Ongoing Something that cannot be limited	Having no end	
Infinite number between two numbers Distance that is difficult to measure Relative, distant compared to short distance Not numerically measurable That cannot be expressed in numbers Without time or dimension Time	Numerical value	Mathematical
Virtual image Virtual image in dot shape In optics, the image is furthest away Out of center distance in optics Reflection of rays moving away from each other The last point where the image can form Failure to detect center distance (R) Endless image When p=q	Distance in optics	Physical
Much further than expected Undetectable distance Very far point The farthest point you can go Unpredictable distance The farthest place	Distance	

Table 8, it can be seen that there is more diversity of expressions in the codes, sub-themes and themes of pre-service teachers' definitions of the concept of infinity after the image formation experiment in the convex lens, compared to the definitions before the experiment, and that there are parallel expressions in the sub-themes and themes. It seems that the themes regarding pre-service teachers' definitions and understanding of the concept of infinity are general, mathematical and physical.

Some answers given by the pre-service teachers to this question are given below as examples:

S_1: To me, infinity means containing everything and containing every possibility. Having endless amounts of it is what makes the infinite infinite.

S_2: It means endless, always ahead. For example, while there is a certain limit within which real images that do not form at infinity will appear, the image formed at infinity will continue to form no matter how far the obstacle in front of it moves.

S_3: Infinity, in general definition, is the multiplicity that even our perception cannot grasp. For optics, infinite rays continue forever, do not intersect, and continue unless an object blocks them.

Discussion and Results

While the codes belong to the pre-service science teachers' definitions below the mathematical and physical themes are lesser before the image formation experiment in the convex lens, it was determined more in their definitions after the experiment. The reason for this difference can be stated that the experience of image formation at infinity was effective in the image formation experiment in the convex lens. While pre-service science teachers mostly try to define infinity with concepts such as unknown, undetectable, unmeasurable, undetectable, unexplained, uncomprehended, they define infinity with general expressions. This understanding of the pre-service science teachers leads them to the misunderstanding that the image of the object at the focal point formed at infinity in the optical lens cannot be seen. This result can be supported by the findings of Kocakülah and Şardağ (2013). However, the infinity in this case can be explained by the fact that the image can be projected onto the screen as a real image at any point placed at certain distances from the lens. Because in the experiment, while the clear image of the object located off-center or at any point between the focal point and the center can be projected onto the screen at a certain location, the image of the object at focal point is reflected on the screen at every point away from the lens. At this point, because the pre-service teachers generally interpreted infinity as unknown, unperceivable, undetectable, very distant, very big, they described the image formed at infinity in the experiment as virtual and invisible before the experiment. While the number of the pre-service science teachers who stated that the image at infinity is real and visible increased after the experiment, the number of the pre-service science teachers who could not clearly express this situation also increased compared to before application. Considering the existence of interpretations infinity such as where the rays move away from each other in geometric optics, not intersecting, and parallel reflection in the definitions in the explanations of the pre-service teachers, it can be explained why the image formed at infinity in the convex lens is expressed as virtual and invisible by the pre-service teachers. Therefore it is possible to mention a misunderstanding that reflected or refracted rays should not intersect in order to form an image in optics. However, according to the particle model of the light, the image is formed when light rays are reflected from any obstacle and reach the eye. Each ray falling on the screen will cause the image to appear on the screen. These results can be supported the results of many studies that found that pre-service science teachers have low conceptual understanding levels on light and optics (Demirci & Ahcı, 2016; Büyükkasap et al. 2013; Yağbasan & Gülçiçek 2003; Goldberg & McDermott, 1987).

While pre-service science teachers' definitions of the concept of infinity created the sub-themes of “unknown”, “having no end”, “numerical value”, “optical distance”, “distance”, these sub-themes were categorized under general, “mathematical” and “physical themes”. The Pre-service science teachers' understanding of infinity corresponds more to the sub-themes of the “unknown” and “having no end”, both before and after the case study application. When the codes of these sub-themes are examined, it is seen that the codes are mostly in the form of interpretations of the concept related to daily life experiences. Therefore, these two sub-themes can be mostly categorized under the “general” understanding theme. In this regard, this result supports the study conducted by Çelik and Akşan (2013). Çelik and Akşan (2013) state that the pre-service science teachers' understanding of the concept of infinity is mainly shaped by their daily life experiences, that they are not successful in explaining the concept correctly, and that they mainly base their explanations of the concept of infinity on the concepts of endless, very large, unlimited and unknown numbers. Some of the pre-service science teachers use expressions corresponding to codes such as space between numbers, cannot be expressed with numbers, space between two numbers, and cannot be measured numerically in their definitions of the concept of infinity. These codes were discussed in the numerical value sub-theme and it was evaluated that a significant portion of the pre-service science teachers had a mathematical understanding of the concept of infinity. As a matter of fact, Singer and Voica (2010) state that infinity is inevitably associated with numbers and draw attention to studies on number perception on this subject. Singer and Voica (2008) discuss the perception of infinity of students of different ages in three categories: processual, topological and spiritual. Beyond these Smith, Solomon, and Carey (2005) found a high level of consistency between the thoughts of children aged 8-

12 about the infinite divisibility of number and weight, and in this study, some of the pre-service science teachers also expressed infinity with some physical quantities in the material world in their definitions. According to the codes gathered under the sub-theme of optical distance, it is seen that the pre-service science teachers have a physical understanding expressed with codes such as "a virtual image in the form of a point, the farthest point of the image in optics, the reflection of rays moving away from each other outside the center distance in optics, the last point where the image can form". Similarly, the sub-theme of “distance”, expressed with codes such as "much further than expected, the farthest point to go, unpredictable distance" used by pre-service teachers in their definitions of infinity, was also expressed as a “physical theme”. This result can be interpreted as prospective teachers' experiences in the physical universe regarding the concept of infinity are effective. At this point, Date et al. (2017)'s finding that the connections between mathematical and empirical applications of infinity can help the pre-service science teachers to compare finite models of the world with infinite models can be said to support this result.

Recommendations

In this study, it was tried to reveal the understanding of the pre-service science teachers in some cases in optics, one of the physics subjects, about infinity, which is a concept that is difficult to understand and comprehend. The demonstration experiment used in this study is an experiment that is included in the program, theoretically and practically, under the relevant headings of the physics courses of the pre-service science teachers during their secondary and undergraduate education, and is an experiment that they work on or should work on. Considering the results obtained in the study, it is clear that the pre-service science teachers have deficiencies in the topics related to image formation and image properties in the convex lens. The only reason explaining this situation is that the applications, laboratory and experimental activities in physics courses are not sufficient and effective. Therefore, increasing the effectiveness of applications carried out with correct conceptual perception and understanding in physics courses in secondary and higher education programs can be expressed as an important suggestion of this study. In order to develop the conceptual perception and understanding of infinity in the most accurate way in the optical subjects covered in this study, a sample experiment application is also presented to the attention of teachers, students and researchers. The concept of infinity is a concept that is frequently used in philosophy, theology, mathematics, psychology and in our daily lives. Therefore, the definition and meaning of this concept in other fields affects the definition and meaning in science or physics classes. As seen as a result of this research, the fact that the pre-service science teachers made sense of or defined the concept of infinity with general, mathematical and physical knowledge indicates that the definition of the concept in other fields is also important. The pre-service science teachers mostly used the expressions discussed in the general knowledge theme in their definitions. Since infinity, in its most general and simple sense, connotes having no end, it can be stated that the formation of images in lenses and mirrors causes the situations in which infinity is expressed to be incomprehensible. Therefore, these situations in geometric optics should be handled in accordance with the correct definition of the concept in the relevant documents in the textbook and other sources.

Compliance with Ethical Standard

In the research, all rules specified within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed. None of the actions mentioned under the heading "Actions Contrary to Scientific Research and Publication Ethics" in Article 4 of the directive have been carried out.

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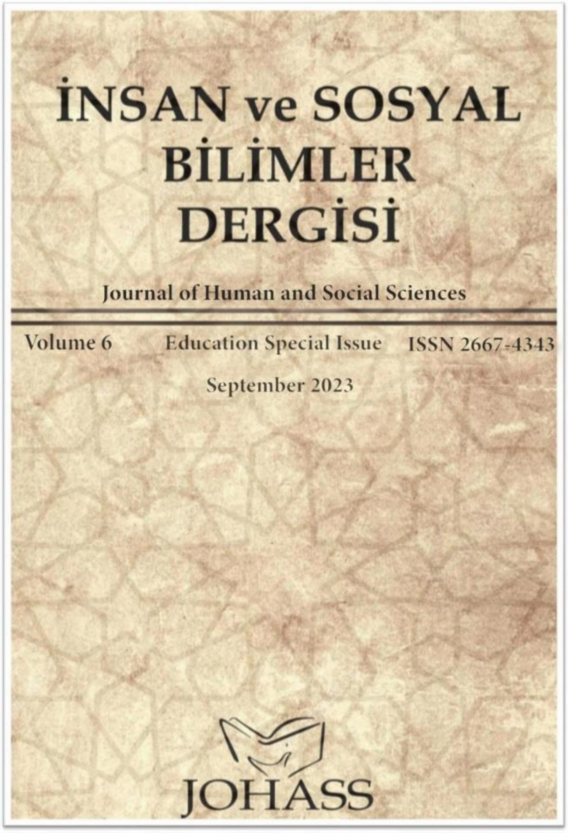

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Evaluation of Life Satisfaction Levels of Elderly Immigrants Who Migrated From Afghanistan, Syria, And Iraq to Sivas (Türkiye)

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Abstract

Little is known about the elderly who are subject to forced migration, and studies on older migrants are very limited. The aim of this study was to determine the socio-demographic characteristics and evaluation of life satisfaction levels of elderly immigrants who migrated from Afghanistan, Syria, and Iraq to Türkiye. A cross-sectional research design was carried out by collecting data from 87 elderly immigrants in Sivas between 01.12.2021 and 28.02.2022 2021. In the study, descriptive statistics, independent sample t-test and ANOVA test were used to evaluate the data. A significant difference was found in the level of life satisfaction according to the socio-demographic characteristics of the participants according to the country they migrated to. It was determined that the participants' self, social satisfaction and general satisfaction levels were higher, and their relationship satisfaction levels were relatively low, respectively. Local and international efforts should be increased to improve the adaptation of the elderly immigrants to the cultural differences of the country they migrated to, and to improve their life and relationship satisfaction.

Keywords: Migration, elderly immigrant, forced migration, life satisfaction, cultural integration

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Introduction

Being one of the important stages in human life, old age is a period that brings with it many features and problems. There are many physical, psychological, economic, social and cultural changes in old age. Compared to traditional societies, the life of the elderly changes much more in modern societies.

In general, it can be stated that “aging is relative and the aging process is universal” (Müftüler, 2021, pp. 6). In the aging process, primary (normal) aging is the gradual, universal, inevitable, normal and age-related changes —such as graying of hair—that occur in all members of a species. Secondary aging, like diseases, occurs in most people, but is not universal and inevitable. Tertiary aging is the rapid deterioration that heralds the end of life; Significant changes in health and social life are examples of this (Müftüler, 2021, pp. 13).

Apart from these changes experienced in the aging process, considering the phenomenon of migration in terms of both individual and social effects, "elderly immigrants" are important in terms of the conditions they live in and the problems they experience. Therefore, elderly immigrants have been chosen as a research subject because they are a more sensitive group due to both the problems arising from old age and the problems experienced with migration. While every type of migration is a difficult situation for those who are exposed to migration experience, migrations that take place in parallel with the reasons for forced migration can leave much deeper traces in terms of socio-psychological effects as well as economic problems. Elderly people are at the forefront of those who experience these scars traumatically. Because it is extremely difficult for them to break away from the geography where they were born and raised, to migrate to a new place, to accept it and to adapt. Another situation that increases the aforementioned difficulty is poverty. The elderly, who had to migrate unprepared and without experience, have problems in accessing services such as nutrition, health and care (Tümtaş, 2021, pp.227).

According to Korkmaz Yaylagül (2019, pp. 220), who draws attention to the fact that making generalizations can lead to wrong results because the researches on migration and old age are not comprehensive but conducted with different ethnic groups, the advantages / vulnerabilities brought by old age and conditions brought by immigration, in some areas is partnering. The reasons for migration at a old age vary. Forced migration due to reasons such as return migration of immigrants to their home countries, labor migration, lifestyle migration to countries with generally warmer climates, war, authoritarian governments, as well as to receive care or health care, or in a limited manner to the elderly, migrations made by individuals to settle with immigrant children are evaluated in the category of "old age and migration".

Individuals who migrate at a old age have difficulties in adapting to new living conditions. The difficulties they face differ from those faced by children or young immigrants (Treas and Mazumdar, 2002, pp. 244). It is seen that young immigrants achieve social participation faster, adapt to new cultures more easily and learn a new language faster. As a result, the adaptation and acculturation of older immigrants is slower and more stressful. They have less sense of belonging to the new society they migrate to (Becker, 2002, pp. 79).

Studies on caregiving practices for the elderly in immigrant communities have shown that cultural principles are heterogeneous even within a single group (Giuntoli & Cattan, 2012, pp. 133). Differences arise not only from culture but also from individual characteristics and life experiences of people. In this sense, the expectation of elderly immigrants is the expectation of protecting human dignity, which can be expressed as a sense of security and respect in the physical and psychic sense (Giuntoli & Cattan, 2012, pp. 139-140).

Examining the findings of studies on the happiness of international immigrants, Hendriks (2015, pp. 361) states that immigrants generally do not reach the happiness they expect. Because in the host country, they face various psycho-social difficulties such as the absence of important/close people in their lives, cultural inequalities, language restrictions and social degradation. In addition to the characteristics of the receiving and sending country, personal abilities and characteristics play an important role in the differences in happiness outcomes among migration flows. Happiness is not attained because of the difficulties specific to migration such as worse objective conditions, feelings of deprivation, cultural characteristics, discrimination and language limitations.

Therefore, apart from this situation created by the difficulties related to migration in general, the situation is much more thought-provoking, especially for the elderly who came to another country with forced migration. Because the above-mentioned bad objective conditions, feelings of deprivation, language limitations, etc. problems are more intense in older immigrants.

Apart from the universal problems in old age, the society in which the elderly individuals live in general and the conditions of the elderly individual in particular are important. It can be stated that the theoretical approaches showing that the individual aspect of old age should be taken into consideration as well as the social aspect can be explanatory on the subject. In this context, as Müftüler (2021, pp. 57-58) states, people are in biological, psychological and social change until they die, and some social and historical changes such as economic crises and wars also affect this change. As a matter of fact, it is emphasized that the general historical, social, economic and cultural structure in the life route theory affects the living conditions of the elderly; For example, a country's economic crisis or war and prejudices against the elderly in the cultural structure.

Migration and Migrant

Migration, which is as old as human history, is a phenomenon that brings significant changes in human life and social structure, happens for different reasons. Economic, political, cultural and psychological factors affect both the reasons for migration and the experiences during and after the migration process.

In modern times, industrialization and job opportunities bring migration to the cities, as well as the labor needs of employers and migration due to the effect of the labor market. The migration of some sociological masses due to their security has shown that migration is mostly based on coercion rather than a free choice (Giddens & Sutton, 2018, pp. 109). Migration is not always voluntary or freedom; It is seen in the past and today that forced migrations can occur. In fact, despite the anti-immigration policies, new waves of migration are experienced, and in our age, which is characterized as the "age of migration", forced migrations are witnessed due to security reasons such as war, conflicts.

Migration, which takes place for very different purposes in our age, is basically classified with five elements: "1) Migration for a new life, 2) Work migration, 3) Forced migration, 4) Touristic migration, 5) Reverse migration" (Balcıoğlu, 2007, pp. 82) Among them, "forced migration" and "reverse migration" types have been observed more recently.

As a result of the change in agriculture and the dissolution of the rural structure, the people who migrated to the cities achieved to establish a new life for themselves and to have a job by being included in the internal migration. In line with the labor demand of developed industrial countries, there was also a migration of workers abroad from Türkiye. Forced migration for security reasons came to the fore, especially because of terrorism. Especially due to the Covid-19 pandemic and in order to make a living more easily economically, the type of "reverse migration" from the city to the country side was also observed. Also, for Türkiye, it is no longer just a receiving or giving immigration country; it should also be noted that it is a transit country for those who want to go to other countries.

Birth, death and migration shape the demographic transformation, which is one of the basic dynamics affecting Türkiye's social structure. Demographic change, on the other hand, is influenced by economic, political and social factors. In 2000, both death and birth rates stabilized at low levels; under normal circumstances, large fluctuations in birth and death rates are not expected. It is also thought that the decrease in fertility and the aging of the population will have negative consequences on the country's economy and social welfare. Challenges such as the increasing health and social security needs of the aging society and the increasing prejudices against the elderly can be solved with social policies (Aysan, 2015, pp. 83).

Although the increase in the elderly population with its internal dynamics and the effects it will create are important; especially the new wave of international migration affects Türkiye. The number of people who came to Türkiye with the forced migration process is very high, the duration has exceeded ten years and those born in Türkiye during this period are not few.

Although the status of the incoming people is not "refugee" according to international law, it can be said that they are sociologically refugees in Türkiye's agenda. The sociological and legal definition of immigrants, who came to Türkiye with the opening of the first temporary shelters in 2011-May for Syrians who left their country due to the civil war in Syria, brought up a conceptual distinction. This situation forced Türkiye to legally define the sociological migration of Syrians (Ayan, 2022, pp. 107).

With the "intense population influx" that took place due to the civil war in Syria, Türkiye has moved from being a "transit country" to a "target country". Individuals under temporary protection (IUTP) in Türkiye, if they were gathered in a single province, they would constitute Türkiye's 4th largest province. According to 4 different scenarios developed in the projections of the population of Syrians UTP in Türkiye, the population of Syrians UTP in Türkiye in 2025 will be expressed as a number between 2.4 million and 3.7 million (Taştan and Çolpan Kavuncu, 2017, pp. 1).

The counting of refugees who migrate from their country to another country for various reasons is determined by legal regulations. Since the legal status of Syrians in Türkiye is different, they are mentioned in legal texts as asylum seekers and/or population under temporary protection (International Organization for Migration, 2019). In this study, the elderly immigrants whose life satisfaction is tried to be determined are among the refugees and/or the population under temporary protection who came to Türkiye through forced migration.

Migration and Old Age

First of all, migration is mostly carried out or dare during youth or adulthood, whereas older people, including where they live, are generally not very pro-change. On the other hand, elderly immigrants, who are the subject of the study, experience many changes, even if they do not want to. In this regard, "two different situations should be taken into consideration when talking about immigration and old age. The first is the case of immigrating to a foreign country at a young age and aging there. The second is to migrate to another country at a old age. For old immigrants, the migration experience is perhaps even more of a harbinger of life change than for younger ones. …difficulty adjusting to a new situation… Loss and the accompanying grief particularly affect the mental health of older migrants." (Seedsman, 2014, p. 238). On the other hand, the phenomenon of aging itself has changed field "with the effect of transnational organizations (such as the World Bank and IMF) and cross-border migration in the international context, creating new conditions and environments for older people". Aging is no longer a "national" issue, it is a problem affecting transnational institutions and communities…" (Powell, 2014, pp. 138). According to Horn and Schweppe (2017, pp. 335), there is work to be done in the field of transnational aging and its importance is increasing day by day because in many industrial countries the migrant population is aging and immigration during retirement is also increasing.

In our age, which is called the age of migration, "…globalization leads to changes that complicate the lives of elderly people by encouraging social mobility and migration" (Powell, 2014, pp. 152) in the relationship between aging and migration. It can be stated that migration is not a very positive process for the elderly who came through forced migration. That is, "migration is a process involving multiple losses because immigrants need to develop effective strategies to adapt to the new country and thus reinvent themselves. The failure of resolving the loss and grief related to the migration process can affect the mental health of immigrants, especially very old immigrants" (Seedsman, 2014, pp. 238). Research findings on elderly refugees in Europe revealed that the main problems faced by elderly refugees and asylum seekers are low income, language barrier, loneliness, lack of social networks and status loss (Korkmaz Yaylagül, 2019, pp. 222).

Life Satisfaction in Old Age

In advanced ages, people want to lead a comfortable and peaceful life. The concept of life satisfaction is defined as the state or result obtained by comparing a person's expectations (what he wants) with what he has (what he has); It includes the whole life of the individual in general and the various dimensions of this life. Life satisfaction, it is an important element of quality aging (Kalınkara, 2014, pp. 245). Appropriate living conditions, living without being excluded from society, participating in meaningful activities, health services, friend and neighbor relations are effective in life satisfaction (Müftüler, 2021, pp. 267). For example, the level of material well-being is effective in whether or not there is life satisfaction. However, the living standard of the elderly population in Türkiye is low. Namely: Pensions paid to retired elderly citizens in Türkiye are the lowest rate according to OECD country standards and remain below the poverty line (Yemeniciler, 2021, pp. 85). However, with an interesting encountered:

It is clear that elderly poverty also reduces life satisfaction, but it is also observed that elderly people with low economic status and low quality of life have high life satisfaction and are grateful for their well-being. This situation brings to mind the relationship between religious belief, gratitude and life satisfaction (Müftüler, 2021, pp. 269). This situation, which is observed in many elderly people in our society, is also seen in elderly immigrants, especially because they are freed from "security" concerns. Türkiye, where policies towards the elderly can be considered relatively new, has also encountered Syrian elderly immigrants added to its population since 2011 as a new social policy group. Although there are some similarities with the local elders in the aging experiences of the Syrians who came to Türkiye, it is understood that they face poverty because they come for the safety of life as part of a community that has been damaged both physically and mentally due to the war. Within the scope of the ESSN (Social Cohesion Assistance) program financed by the EU, aid support for elderly immigrants is also very insufficient (Nizam and Turkmen, 2021, pp. 256-257).

Old age is a period in which many different problems are seen together, with serious difficulties both physically and socially. Old age, both as physical and social problems as experienced individually, as well as socially, it can be considered through its effects on society (Akşit, 2021, pp. 10-11). It is expressed as the process of accepting cultural diversity, both the indigenous population and the immigrants or refugees, to maintain a degree of cultural integrity and to determine a strategy to participate in society. The issue of cultural integration strategy evaluates the opportunities provided to refugees in general. Refugees have areas of integration such as economic, social and legal opportunities. However, limited access to opportunities, cultural integrity and host country limitations may cause limitations in social ties of immigrants (Feinstein et al., 2022, pp. 2180-2181). Migration of elderly individuals is very important for the economies of host countries due to their increasing population, and at the same time, it is accepted that it is inevitable to secure access to health services for a significant number of people with a very high individual rate (Holecki et al., 2020, pp. 3). Although individuals experience disruptions in their family life due to migration, migration also brings uncertainties that increase stress and anxiety as it involves a radical break in culture and values (Solis et al., 2021, pp. 319). Ethnicity and culture have a significant impact on older immigrants. Older immigrants are problematized because of cultural assumptions and generalizations, and this also affects social and health services (Göttler, 2021, pp. 2291). In terms of life satisfaction in old age, elderly immigrants, who do not have the chance to "age in place" other than the problems seen with age and their socio-economic conditions, can be expected to be more disadvantaged.

Method

The aim of this study was to determine the socio-demographic characteristics and evaluation of life satisfaction levels of elderly immigrants who migrated from Afghanistan, Syria and Iraq to Türkiye. For this purpose, research it is restricted to immigrants aged 65 and over under temporary protection who were settled in Sivas in Türkiye.

The population of the study consists of elderly immigrants living in Sivas between 01.12.2021 and 28.02.2022. There were a total of 112 immigrants in the specified date range. The questionnaire was applied through an interpreter by going to the addresses obtained from Sivas Migration Management Directorate. All immigrants were tried to be reached between these dates. A face-to-face survey was conducted through an interpreter by going to the home addresses of the elderly immigrants. However, for some reasons, the questionnaire could not be applied to 25 people, some of the elderly immigrants who make up the universe. (such as 2 deaths, others going to another city in Türkiye, visiting their own country, not being at home, changing their address, not wanting to answer the survey). For these reasons, a total of 87 people could be surveyed. This number constitutes approximately 78% of the population. In addition, it was calculated that 87 people forming the sample were sufficient for the 95% confidence interval (Sümbüloğlu & Sümbüloğlu, 2005, pp. 104-105).

In order to evaluate the data in the study, frequency, percentage, averages and comparisons were made as descriptive statistics, and independent sample t-test and Anova test were used. Value of $p<0.05$ was accepted for the significance level of statistical tests.

In this study, a total of 29 questions were asked in order to determine the socio-demographic characteristics of the participants. In addition, the "Adult Life Satisfaction Scale" (ALSS) developed by Kaba et al. (2018, pp. 1) was used to determine the life satisfaction levels of immigrant individuals over the age of 65. The Adult Life Satisfaction Scale (ASLS) consists of 21 items and includes a five-factor structure. It is scored on a 5-point Likert-type scale: 1 = Not at all suitable, 2 = Not suitable, 3 = Partially suitable, 4 = Appropriate, 5 = Completely appropriate. High scores obtained from the scale mean that the individual has positive perceptions about his/her own life (Kaba et al., 2018, pp. 7). 4 items in the scale that were thought to be unsuitable for the purpose of the study were not included in the study. In our study, the reliability value of the scale was determined as 0.655.

Compliance with Ethical Standard

Before starting the research, written permission was obtained from Sivas Cumhuriyet University Ethics Committee (dated 29.10.2021 and decision number 91621).

Findings

This section includes research findings and analysis. Comparative data on the socio-demographic characteristics and life satisfaction scores of the participants are presented.

Table

Distribution of the Participants According to Their Socio-Demographic Characteristics (n=87)

Place of birth	***N***	***%***	**Duration of residence in Türkiye**	***N***	***%***
Afghanistan	75	86,2	Less than 1 year	1	1,1
Iraq	2	2,3	1-2 years	2	2,3
Pakistan	1	1,1	2-5years	49	56,3
Syria	9	10,3	5+	35	40,2
Gender			**Where did you migrate from?**		
Female	41	47,1	Afghanistan	76	87,4
Male	46	52,9	Syria	9	10,3
Who Made the Migration			Iraq	2	2,3

Decision					
Myself	21	24,1	**Educational Status**		
My wife and children	63	72,4	Illiterate	66	75,9
Relatives and acquaintances	2	2,3	Literate	15	17,2
Other	1	1,1	Primary school	1	1,1
Marital status			Middle School	1	1,1
Married	75	86,2	University	4	4,6
Lost his/her wife	12	13,8	**Nationality**		
Single/Never married	0	0,0	Syria	8	9,2
Number of children			Iraq	2	2,3
1-2	10	11,5	Afghanistan	70	80,5
3-4	23	26,4	Uzbekistan	5	5,7
5-6	23	26,4	Other (Turkmenistan and Pakistan)	2	2,3
7+	31	35,6	**Person living together**		
Occupation			My wife	7	8,0
Farmer	12	13,8	Me and my single kids	19	21,8
Housewife	39	44,8	My wife and single children	60	69,0
Worker	13	14,9	Other	1	1,1
Artisan	9	10,3	**Your working status**		
Other	14	16,1	I am not engaged in an income generating business	86	98,9
Monthly income amount			I am engaged in an income generating business	1	1,1
0-1000	2	2,3	**Where do you earn your living?**		
1001-2000	44	50,6	I have no income	1	1,1
2001-3000	31	35,6	Wage	8	9,2
3001-4000	7	8,0	Social help	55	63,2
4000 ve üzeri	3	3,4	With the financial support of children	23	26,4
Type of residence you live in			**How is your economic situation according to you?**		
Detached house with natural gas	4	4,6	Moderate and good	21	24,1
Flat with natural gas	20	23,0	Bad	58	66,7
Detached house with stove	63	72,4	Too bad	8	9,2
The positive side of migration according to you			**Reasons to migrate**		
Finding a job	3	3,4	Security reason	82	94,3
Positive physical environment	7	8,0	Education of children	2	2,3
Education of children	4	4,6	Living in better conditions	2	2,3
Security	73	83,9	Other	1	1,1
Are you considering returning to your country?			**The Negative Side of Migration According to You**		
Yes	5	5,7	Economic difficulties	22	25,3
No	82	94,3	Negative physical environment	3	3,4
Do you receive social assistance?			Security	1	1,1
Yes	73	83,9	Distance from relatives	3	3,4
No	14	16,1	No downsides	58	66,7
TR- Do you have the right to citizenship?			**If you answered yes to the question (Do you intend to return to your country), why?**		
Yes	2	2,3	Those who say no	82	94,3
No	85	97,7	If the economy improves	1	1,1
Have you made any attempt to immigrate from Türkiye to another country?			Because it's hometown	1	1,1
I talked to UNHCR	12	13,8	If the war ends	3	3,4

By my own means	2	2,3	**Do you intend to immigrate to another country from Türkiye?**		
I did not attempt	39	44,8	Yes	53	60,9
Those who do not want to migrate	34	39,1	No	34	39,1
If you receive social assistance from which institution?			**If yes, which country do you want to go to? (the country they want to migrate to)**		
Municipality	2	2,3	Germany	11	12,6
Social security institution	4	4,6	America	14	16,1
Non-governmental organizations	67	77,0	Austria	1	1,1
Are you registered with the immigration office?			Belgium	1	1,1
Yes	84	96,6	It doesn't matter	8	9,1
No	3	3,4	Britain	2	2,3
			Iranian	1	1,1
			Switzerland	3	3,4
			Canada	12	13,8

The mean age of the participants was found to be 68.5± 4.68 years. The lowest age is 65 and the highest age is 89. 86% of the 87 participants over the age of 65 who migrated in Sivas were born in Afghanistan. While there are 67,283 elderly people migrating from Syria throughout Türkiye, the majority of the elderly immigrants that make up the sample of the research are Afghan people since the number of Syrians residing in Sivas is less (https://multeciler.org.tr). 56.3% of the participants have been residing in Türkiye for 2-5 years and 40.2% for more than 5 years. 52.9% of the participants are male and 47.1% are female. It was determined that 87.4% of the participants immigrated from Afghanistan, 10.3% from Syria and 2.3% from Iraq. 86.2% of the participants are married and 80.5 of them are from Afghanistan. 35.6% of the participants have 7 children, 69% live with their spouses and single children, 44.8% are housewives. 63.2% of the participants earn their living from social assistance and 98.9% of them are not engaged in a job that generates income. 50.6% of them state that they have a monthly income between 1001-2000 TL and 66.7% of them state that their economic situation is bad.

It was reported that 72.4% of the participants lived in a detached house with a stove and 94.3% migrated for security reasons. 83.9% said that the positive side of migration was “security”, 66.7% said that there was no negative side of migration and 25.3 of them stated that there are “economic difficulties” as the negative side of migration.

It was determined that 94.3% of the participants did not want to return to their country, and those who wanted to return to their country thought to return if the war ended in their country.

It was determined that 83.9% of the participants received social assistance, and 77% of those who received social assistance received this social assistance from non-governmental organizations.

97.7% of the participants are from T.C. stated that they do not have the right to citizenship, and 96.6% of them are registered with the immigration administration.

39.1% of the participants stated that they did not want to immigrate from Türkiye to another country, 44.8% stated that they did not take any action in this regard, and only 13.8% of them talked to the UNHCR.

16.1% of the participants who wanted to immigrate stated that they preferred to immigrate to America and 12.6% to Germany.

Table 2

Comparison of life Satisfaction Scores of İmmigrants According to Their Socio-Demographic Characteristics (n=87)

Variables		N	Mean	Std.D.	Result
Those who want to immigrate from Türkiye	Yes	53	3,24	0,33	*t*= 0,215
	No	34	3,23	0,37	*p*= 0,830
Do you receive social assistance?	Yes	73	3,23	0,35	*t = -0,407*
	No	14	3,27	0,35	*p*= 0,685
Marital status	Married	75	3,25	0,35	*t = 1,163*
	Lost his wife	12	3,13	0,30	*p*= 0,248
Gender	Female	41	3,20	0,33	*t = -0,921*
	Male	46	3,27	0,37	*p*= 0,360
Do you want to return to your country?	Yes	5	3,05	0,25	*t = -1,200*
	No	82	3,25	0,35	*p*= 0,233
Number of children	1-2	10	3,44	0,24	
	3-4	23	3,24	0,33	*F=1,742*
	5-6	23	3,26	0,38	*P=0,165*
	7+	31	3,16	0,35	
Monthly Income	0-1000	2	2,91	0,20	
	1001-2000	44	3,20	0,34	F=0,978
	2001-3000	31	3,31	0,36	P=0,424
	3001+4000	7	3,21	0,35	
	4001>	3	3,37	0,20	
Lived housing type	Detached house with natural gas	4	3,44	0,15	F=0,672
	Flat with natural gas	20	3,22	0,41	P=0,513
	Detached house with stove	63	3,23	0,34	
Economical situation	Moderate and good	21	3,3249	,34179	F=,976
	Bad	58	3,2262	,35342	P=0,381
	Too bad	8	3,1397	,37592	
Where did you migrate from?	Afghanistan	76	3,2454	,34812	F= 3,096
	Syria	9	3,0980	,32752	P=0,050*
	Iraq	2	3,7647	,08319	

In Table 2, the results of the analysis regarding whether there is a significant difference in life satisfaction levels according to the socio-demographic characteristics of the participants are given. The life satisfaction levels of the participants were found to be significantly important according to the country they migrated to. The level of life satisfaction (general) of elderly individuals who migrated from Iraq to Türkiye was found to be statistically significantly higher than those who migrated from Syria and Afghanistan. In addition, those who immigrated from Afghanistan were found to have higher life satisfaction than those who immigrated from Syria. Accordingly, the life satisfaction levels of the elderly Syrian immigrants were found to be lower. Respectively, Iraqi and Afghan immigrants, have higher life satisfaction levels.

Do you want to immigrate from Türkiye, do you receive social assistance, marital status, gender, number of children, monthly income, economic situation, do you want to return to your country, there was no significant difference between the variables of lived housing type ($p>0.05$).

Table 3

Comparison of the Participants' Scores on the Country They Migrated to and the Life Satisfaction Scale Dimensions

Life satisfaction scale dimensions	Country	Mean	Std. Deviation	F	p
Overall satisfaction dimension	Afghanistan	3,26	0,55	0,588	0,558
	Syria	3,05	0,62		
	Iraq	3,16	0,23		
Relationship satisfaction	Afghanistan	2,77	0,79	4,794	0,011*
	Syria	2,36	0,70		
	Iraq	4,25	0,00		
Self satisfaction	Afghanistan	3,58	0,42	1,613	0,205
	Syria	3,77	0,44		
	Iraq	4,00	0,00		
Social satisfaction	Afghanistan	3,37	0,54	1,660	0,196
	Syria	3,25	0,32		
	Iraq	4,00	0,00		

When the elderly individuals who migrated to Türkiye were examined according to their life satisfaction dimensions, no significant difference was found between general, self and social satisfaction dimensions. A statistically significant difference was determined between the levels of relationship satisfaction ($p<0.05$). In the dimension of relationship satisfaction, it was determined that the life satisfaction levels of Iraqi immigrants were higher than immigrants from Syria and Afghanistan. In addition, those who migrated from Afghanistan were found to have higher relationship satisfaction than those who migrated from Syria (Table 3). Respectively, Iraqi and Afghan immigrants have higher relationship satisfaction levels.

Accordingly, it can be said that Iraqi and Afghan elderly immigrants have higher life satisfaction in their relationships with their families and friends.

Table 4

Distribution of the Scores Given to the Life Satisfaction Scale by İmmigrants (n=87)

Life satisfaction dimensions (mean and standard deviation)	Scale Items	Min.	Max.	Mean	Std. Deviation
1. General satisfaction (3,24±0.55)	1. I am satisfied with my life	1,00	5,00	3,74	0,82
	2. My life conditions are perfect	1,00	5,00	3,55	0,91
	3.My life is better than the lives of most of my friends.	1,00	5,00	3,11	1,03
	4. I have achieved important things from life so far.	1,00	4,00	2,83	0,96
	5. I have a good life.	1,00	4,00	3,31	0,94
	6. I have many “I wish”s in my life.	1,00	5,00	2,88	1,06
2.Relationship satisfaction (2,76±0,81)	7. I like to spend time with my family.	2,00	5,00	4,28	0,52
	8. I have enough friends.	1,00	4,00	2,41	1,24
	9. My friends help me when I need it.	1,00	4,00	2,09	1,05
	10. I am satisfied with my friends.	1,00	4,00	2,27	1,16
3. Self satisfaction (3,61±0,42)	11. I am a fun person.	1,00	4,00	3,13	0,99
	12. I love myself.	2,00	4,00	3,87	0,47
	13. I am a good person.	1,00	5,00	3,96	0,44
	14. I find myself successful.	1,00	5,00	3,49	0,87
4.Social satisfaction (3,37±0,52)	15. I am satisfied with my neighborhood.	1,00	5,00	3,94	0,46
	16. I am satisfied with my neighbors.	1,00	5,00	3,87	0,66
	17. There are many activities that can be done where I live.	1,00	4,00	2,31	1,05
Life satisfaction scale		2,41	3,94	3,25	0,36

In Table 4, the life satisfaction levels of the participants are given. In general, the average score of the participants from the life satisfaction scale is 3.25, which is at the “moderate” level. The highest average scores of the participants' life satisfaction scale items, respectively; “I am satisfied with my life (3.74)”, “I am a good person (3.96)”, “I am satisfied with my neighborhood (3.94)”, “I love myself (3.87)”, "I am satisfied with my neighbors (3,87)" are items.

The lowest average scores of the participants in the life satisfaction scale are respectively; "My friends help me when I need it (2,09)", "I am satisfied with my friends

(2.27)", "There are many activities that can be done in the place where I live (2,31)", "I have enough friends (2,41)" and "I have achieved important things from life so far (2,83)", are items.

In addition, it was determined that the level of self-satisfaction of the immigrants was higher (3.61±0.42) and the level of relationship satisfaction (2.76±0.81) was the lowest according to the dimensions of the life satisfaction scale. Accordingly, while the participants' self, social satisfaction and general satisfaction levels are higher, respectively, their relationship satisfaction levels are relatively low.

Discussion and Results

Although "migration and old age" are included among the research topics around the world, there are few studies in the literature on elderly immigrants. This study aimed to evaluate the socio-demographic characteristics of immigrants and to determine their level of life satisfaction for elderly individuals who migrated to Türkiye.

Immigrants aged 65 and over under temporary protection settled in Sivas province in Türkiye, which constitute the sample of the study, migrated to ensure the safety of their families and themselves due to the war in their country. It was determined that they were generally satisfied with the migration decision and did not want to return to their countries. However, according to Comblain et al.'s (2005, pp. 185-186) study, elderly people tend to evaluate negative events more easily and have a higher intensity of positive emotions than younger adults, depending on the past. Older people reevaluate their past by focusing on the positive aspects of negative events (Comblain et. al., 2005, pp. 185-186). Since the main goal of older immigrants in later years is to regulate emotions and create an emotionally meaningful life story; Even if they have had negative migration experiences, they may have evaluated this situation positively and reported more satisfaction with their migration status. In general, it was observed that the satisfaction levels of the elderly immigrants participating in the study in their social relationships were low. Consistent with existing studies (Su et al., 2022, pp. 2), these findings suggest that policy makers and social welfare organizations are effective to reduce the loneliness feelings of older immigrants, increase social support, and thus support older immigrants' life satisfaction. Moreover culturally appropriate social support programs provide an empirical basis to best support minority groups.

In the findings, the relationship satisfaction of Iraqi and Afghan immigrants was found to be higher. Accordingly, it can be said that Iraqi and Afghan immigrants have higher life satisfaction in their relationships with their families and friends. In addition, it was determined that immigrants had higher levels of "self-satisfaction", which is one of the dimensions of life satisfaction scale.

The old age period is a difficult process in itself and the negative experiences of immigration in the elderly who migrate make the situation even more difficult. Reasons such as heavy working and working conditions, inadequate nutrition and shelter, and difficulty in accessing health services cause elderly immigrants to stay away from their social and cultural participation. Older immigrants may have to live alone and in isolation. This situation does not fit the concept of good and quality aging for the immigrant elderly (Lotfi & Erkoç, 2020, pp. 143). When we look at the relationship between satisfaction with the decision to migrate and life satisfaction of elderly immigrants, it is seen that migration is a tool for people to get satisfaction from their lives. With migration, individuals have achieved their life goals such as ensuring the safety of themselves and their families, for some, the education of their children and living in better conditions. In addition, this study showed that the safety needs of older immigrants take precedence over other needs. However, although the economic level of the elderly immigrants participating in the research is low, their self-satisfaction levels are high and they do not want to return to their countries, which is not compatible with the existing literature. In this case, it can be assumed that the participants migrated for certain purposes to improve their lives and that they achieved these goals through migration. Or it may be because they think that the difficult living conditions in their country have not improved yet. Because it has been determined that the rate of those who want to go to other countries is higher.

Existing research has long addressed the types of exclusion (political, economic, social) that cause anxiety, stress, and depression among immigrants. Anthropologists emphasize that complex forces such as social exclusion of these types of exclusion lead to physical and emotional vulnerabilities of immigrants (Sangaramoorthy & Carney, 2021, pp. 591). Immigrants often have to rebuild their social networks when moving to a new country, and they may have difficulty overcoming this situation (Lessard et. al., 2020:3). Findings from Comblain et al.'s (2005) study show that both men and women experience relationship satisfaction and general migration stress. At the same time, considering the stress associated with novelty, discrimination, not feeling at home, language and professional difficulties, and losing the family, it was found that immigration stress negatively affects relationship satisfaction (Comblain et al, 2005). At the same time, the results of the study conducted by Su et al. (2022, pp. 7) showed that both general emotional well-being and cognitively perceived relationship and life satisfaction were negatively affected by perceived loneliness (Su at. al, 2022). In this study, it was determined that the level of relationship satisfaction of immigrants was low in accordance with the literature.

This study is limited to elderly immigrants in Sivas province. This article presents some elements regarding the sources of life satisfaction of elderly immigrants settled in Sivas province in Türkiye and the role of satisfaction with the decision to migrate in overall life satisfaction in a given population. Going forward, it would be appropriate to analyze the broader range of older migrant categories and explore how levels of satisfaction with their decision to migrate in the context of forced migration or older migrants play a role in overall life satisfaction.

If aging occurs in the social environment that he is used to with the material and moral accumulations and memories he has acquired throughout his life, for older individuals, it may not be a big problem, as it is only seen as a stage of life. However, for an elderly person whose place of residence and even the country has necessarily changed, who has lost his social networks, who cannot participate in social life in the country where he lives, who has inadequate physical and economic conditions and who has problems such as loss of social status, not only aging but also the problems he experiences as a migrant are important.

First of all, elderly immigrants who are involved in the forced migration process due to the war, security as the reason for migration; they gave a safety/security response as the positive side of migration. They were happy to be in Türkiye regarding the need for security, which is always a priority in human life. However, the fact that elderly immigrants are in economic distress is the situation they complain most about.

According to the research findings, the average age of the elderly immigrants is 68.5± 4.68 and their life satisfaction level is moderate. According to the socio-demographic characteristics of the participants, a significant difference was found in the level of life satisfaction only according to the country they migrated to.

The level of life satisfaction of elderly individuals who migrated from Iraq to Türkiye was found to be statistically significantly higher than those who migrated from Syria and Afghanistan. In addition, those who immigrated from Afghanistan were found to have higher life satisfaction than those who immigrated from Syria. Accordingly, the life satisfaction levels of the elderly Syrian immigrants were found to be lower. This finding may indicate that Iraqi and Afghan immigrants achieved greater cultural integration. Iraqi and Afghan immigrants had higher life satisfaction.

There was no statistically significant difference between general, self and social satisfaction dimensions according to life satisfaction scale dimensions. Among the relationship satisfaction levels, it was determined that Iraqi immigrants had higher life satisfaction levels than Syrian and Afghan immigrants. In addition, those who migrated from Afghanistan were found to have higher relationship satisfaction than those who migrated from Syria. Accordingly, it can be said that Iraqi and Afghan immigrants have higher life satisfaction in their relationships with their families and friends.

Do you want to immigrate from Türkiye, do you receive social assistance, marital status, gender, number of children, monthly income, economic situation, do you want to return to your country, there was no significant difference between the variables of lived housing type ($p > 0.05$). Accordingly, it can be said that the participants' life satisfaction is at a similar level in terms of these variables.

It was determined that the participants' self, social satisfaction and general satisfaction levels were higher, and their relationship satisfaction levels were relatively low, respectively. The reason for this can be stated that the elderly cannot communicate with the environment, especially due to language problems, and their social relations are limited to family members.

Considering whether they are satisfied with being here and their thoughts about the future, they generally have thoughts of going to another country. Especially their children's desire to go to another country because of their job-future anxiety is expressed, but they are not very hopeful in this regard. It is understood that they want to go to developed countries if they can find the opportunity to go. Almost all of them (94.3%) do not intend to return to their countries. Those who want to stay here (39.1%) also feel satisfied with the neighborhood and neighbors and live without feeling excluded, they state that they are especially comfortable in cultural-religious terms, only that their economic conditions are insufficient.

Regarding the problems of elderly immigrants, they should first learn the daily spoken language and access services, especially health, to participate in religious and social activities, not to be excluded. On the contrary, it is important to be facilitator and supportive in solving their problems, in short, it is important to show the effort to provide humanitarian conditions to elderly immigrants.

Although it is thought that the care needs of elderly immigrants will be met by their families, their children may not have the living conditions to take care of elderly individuals. For this reason, effective cooperation should be exhibited through local, national and international organizations and humanitarian aid NGOs in order to be sensitive to the problems of elderly immigrants and to provide at least their basic needs, to feel more life satisfaction at the end of their lives.

Compliance with Ethical Standard

Before starting the research, written permission was obtained from Sivas Cumhuriyet University Ethics Committee (dated 29.10.2021 and decision number 91621).

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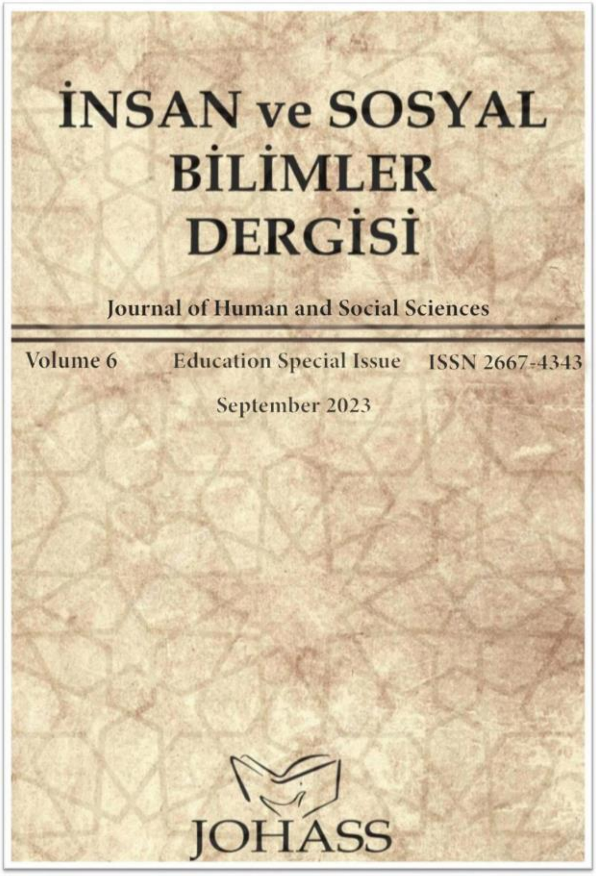

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Problems Encountered in Distance Initial Literacy Teaching During the Pandemic Period (Covid-19)

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Problems Encountered in Distance Initial Literacy Teaching During the Pandemic Period (Covid-19)

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Abstract

This study aims to examine the problems encountered in the period of distance initial literacy teaching during the pandemic based on the first-grade primary school teachers' opinions. In this qualitative study, data were collected through the interview technique. The study group of the study was determined by the criterion sampling method. The study group consist of 11 classroom teachers who taught initial literacy teaching during pandemic period. The data were analyzed by content analysis using Maxqda software. The results of this study show that problems encountered in the distance initial literacy teaching during the pandemic period were grouped under three themes: "Technology", "Interaction," and "Initial Literacy Teaching Process". According to the opinions of classroom teachers, there were problems with internet access during this period. There are insufficient educational technology devices such as computers, tablet computers, etc. The competency of students and parents to use technology is quite insufficient. Students behaved arbitrarily on attendance to classes, and problems occurred in parental support, teacher-student communication, and teacher-parent communication. During the initial literacy teaching process, problems such as holding the pen incorrectly, not being able to organize the notebook, writing the letter incorrectly, not being able to understand and inability to combine sounds, and not being able to dictate were seen. Problems such as measurement and assessment problems, unable to feedback to students, and difficulty in following student progress were determined.

Keywords: Covid 19 pandemic, distance education, initial literacy teaching, classroom teacher

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Introduction

People are a country's most valuable resource. Schools are the institutions where these valuable resources are transformed into power. Schools are also very important institutions for their families and their environment, as they prepare students for professional and social life and shape their future. However, in the 2020-2021 academic year, schools in many countries around the world had to suspend face-to-face education. The World Health Organization (WHO) (WHO, 2020) officially declared the pandemic on 11 March 2020, after the coronavirus (COVID-19) spread to 114 countries and affected more than 118,000 people in 3 months.

The effects of the Covid-19 pandemic in Türkiye caused all institutions and organizations to take precautions, and the Presidency of the Republic of Turkey convened on 12.03.2020 and decided to continue education via distance education between 23-27 March 2020 due to the Coronavirus (COVID-19) pandemic spreading rapidly in the world. Formal and non-formal education institutions of all levels and kinds affiliated with the Ministry of National Education were declared on vacation (MoNE, 2020).

The Covid-19 pandemic has shocked education systems worldwide, and schools have had to adapt to the new system. All students and teachers were not affected equally. UNESCO (2021) states the pandemic has resulted in the loss of knowledge, skills, and topics for most students. Many students are alienated from schools, and some countries experienced increased levels of drop-out. Educational inequality has increased especially among disadvantaged students. Hanushek and Woessman (2020) predicted that learning losses of the pandemic would result in a 3% drop in lifetime income for students.

Decisions taken against the Covid-19 pandemic steered the education systems to search for alternatives. Reimers (2021) stated that digital alternative education practices during the pandemic should be considered largely improvised, and these are not outcomes of a careful planning and design. The efficacy of distance education strategies may not have the same effect among students with different socio-economic backgrounds. The accessibility to digital platforms affects students' participation and adaptation to the education system. These differences are reflected in academic achievement internationally and among students living in the same country. Limited economic resources negatively affect the opportunities and tendencies for teaching and learning of students and make access to resources used by students and teachers difficult.

Teachers, students, and education stakeholders have been required to use distance learning platforms to continue education due to the lockdown of schools following the WHO's declaration of an epidemic. The lockdown required teachers, parents, principals, and students to adapt to the new system in a limited period.

Even though the pandemic has had a negative impact on education, it has also had some positive effects. Most important effect is educators have innovated various improvements during lockdown to continue education. Literature related to improvements have provided information on the expectations and limitations of digital education strategies, innovations led by teachers, and the conditions that support the effective use of digital pedagogies. However, it must be admitted that the digital alternatives improvised during the pandemic were largely improvised - they were not the result of careful planning and design, and so far, researchers have been able to document and reseach a limited number of them. Concerning the efficacy of distance education strategies, there are significant differences between countries and students from different social backgrounds in how they are included in these strategies.

Distance education refers to technology-based education in which students are physically separated from their instructors for the entire duration of instruction (Ormrod, 2008). Distance education, also referred to as distance learning, e-learning and online learning, is a type of education that involves the physical separation of teachers and students during instruction and the use of various technologies to facilitate student-teacher and student-student communication (Berg & Simonson, 2023). Distance education has traditionally focused on non-traditional learners such as full-time employees, military personnel and non-residents or individuals living in remote areas and unable to attend classroom classes. However, distance education has become an established part of the world.

There are advantages and disadvantages to taking distance learning courses. Some of the advantages include the ability to study at your own pace, flexibility of time and space, time savings (no commuting between home and school) and the fact that a distance learning course usually costs less. Disadvantages include a sense of isolation, difficulty staying motivated, lack of face-to-face interaction, difficulty getting immediate feedback, and the need for constant and reliable access to technology (De Paepe et al., 2018; Lei & Gupta, 2010; Venter, 2003; Zuhairi et al., 2006). In addition, converting a course content from face-to-face to online format is time-consuming and requires the teacher to be familiar with and willing to learn online learning pedagogy and teaching tools (Ryan et al., 2012). Some students prefer to learn difficult concepts face-to-face (Jaggars, 2014) and believe that face-to-face instruction provides deeper learning than online (Holzweiss et al., 2014). It is difficult to design fair, equitable and rigorous assessment to minimize cheating and plagiarism online (Lee-Post & Hapke, 2017). Successful education requires the creation and maintenance of a reliable and robust infrastructure that supports both teachers and students (Moskal et al., 2013). Moreover, students may need additional motivation, organization, and self-discipline to succeed in their online learning efforts (Jacob & Radhai, 2016).

When the literature is examined, it is seen that there are a limited number of studies on the problems encountered in teaching primary literacy in distance education (Erbaş, 2021; Özcan & Saydam, 2021.; Kargın & Karataş, 2021; Gürbüz & Yılmaz 2021; Sağırlı, 2021; Aktaş & Çoban Sural, 2023). Sağırlı (2021) found that digital content, social media, internet resources, interested parents, and Educational Informatics Network (EIN) helped classroom teachers who taught primary literacy through distance education. On the other hand, he found that reasons such as insufficient internet, lack of technological tools, indifferent parents, socio-economic conditions, and lack of sufficient interaction with the student were the reasons that caused difficulties for classroom teachers in this process. Kargın and Karataş (2021) determined that internet infrastructure problems, excessive course hours, unconscious behaviors of parents, financial inadequacies of families, insufficient content of EIN and teachers' lack of in-service training negatively affected distance first literacy teaching. Özcan and Saydam (2021) stated that during the Covid 19 pandemic, students living in rural areas experienced more negativity than those living in cities. Şahin and Kalaycıoğlu Akis (2021) stated that during the Covid 19 pandemic distance education process, teachers made their students play games on sites such as Wordwall, EIN, Okulistik. Aktaş and Çoban Sural (2023) stated that the benefits of distance education environment to the process of teaching primary reading and writing were access to various opportunities through technology and educational portals and strengthening the communication between teachers and parents. The difficulties experienced in this process are more than the benefits, and they are expressed as students being negatively affected psychologically in the urgent distance education process, problems arising from technology and educational portals, difficulties in the reading and writing process, and negative effects on teacher-parent-student communication. With these studies, it is seen that the first literacy process with distance education involves more problems than benefits. It is noticeable that the problems are mostly technology-based and there are problems in teacher-parent-student communication. For this reason, this research focuses on technology, interaction, technical aspects of the first literacy teaching process and evaluation of the teaching.

Determining the problems encountered in the process of teaching first literacy in distance education and the sources of these problems according to teachers' views in depth is an extremely important problem situation that needs to be researched.

Purpose of the Research

It can be predicted that first-grade students may have difficulties in their initial literacy learning as a result of factors not yet being able to read and write and limited ability to use digital platforms. This study aims to examine the problems encountered in the period of distance initial literacy teaching during the pandemic based on the first-grade primary school teachers' opinions. Alternative education practices, such as distance education, can be redesigned and developed by considering these problems and can be used more effectively to support the education process in non-pandemic.

Problem of the Research

This study seeks to answer following questions to determine the problems experienced in distance initial literacy teaching during the pandemic period:

What are the problems encountered in the initial literacy teaching by distance education during the COVID-19 pandemic?

Sub-Problems

1. What are the problems encountered in the initial literacy teaching during the Covid-19 pandemic due to technology (computer, internet, materials, etc.)?
2. What are the problems encountered due to interaction (class attendance, teacher-student-family communication, family support)?
3. What kind of problems did you experience int teaching reading (sound sense, letter recognition, reading speed, missing syllables, and words, etc.)?
4. What kind of problems did you experience in teaching writing (Pencil Grip, notebook arrangement, letter writing, etc.)?
5. What kind of problems did you experience with measurement and assessment?
6. What are the problems you experienced in initial literacy teaching?

Method

Model

This is a qualitative study that aims to determine the problems encountered in the initial literacy teaching during the COVID-19 period through distance education based on teachers' opinion. Qualitative research is a type of research in which researchers examine events in their natural settings and attempting to make sense of or interpret the phenomena in terms of the meanings people bring to them. Acording to Denzin and Lincoln (2005) qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals' lives

Reseach data were collected using semi-structured interview method. According to DiCicco and Crabtree (2006) semi-structured in-depth interviews are the most common interview format in qualitative research and can be either individual or group. Generally, it is done one time for an individual or a group and takes 30 minutes to several hours to complete. They are mostly around a set of predetermined open-ended questions, with other questions emerging from the dialogue between interviewer and interviewee/s.

Study Group

One of the purposive sampling methods, criterion sampling method was used in this study. Acording to Patton, (2001) criterion sampling involves the selection, review, and examination of cases that meet some predetermined criterion of importance

The study group consisted of classroom teachers who taught initial literacy teaching to first-grade students tought distance education during the pandemic period in the 2020-2021 academic year. Seven female and four male eleven primary classroom teachers of first grade in different provinces of Türkiye during the pandemic period voluntarily participated in the study group. Participants names were not requested for the protection of personal data and to improve the quality of the research data. Each participant was assigned a code (e.g., Teacher 1: T1, Teacher 2: T2).

Data Collection Tools

Data collection tool of the study is semi-structured interview form developed by the researcher called " Pandemic Period (COVID-19) Initial Literacy Teaching in Distance Education Opinion Form". The form was edited based on the opinions of two faculty members who were experts in the field of educational sciences during the development process of the data collection tool. While preparing the interview form, the relevant literature was first reviewed and a list of questions that could reveal the situation was prepared. The question list was finalized with the opinions of two different experts and two pilot interviews were conducted. As a result of the pilot interviews with volunteer participants, it was concluded that the research questions in the form were clear and understandable.

Collection of Data and Analysis

The " Pandemic Period (COVID-19) Initial Literacy Teaching in Distance Education Opinion Form" was shared online with classroom teachers who taught initial literacy teaching during the pandemic period. Classroom teachers from six different provinces of Türkiye participated voluntarily. The form was answered by the teachers online and e-mailed to the researcher. The researcher received the forms in October-November 2021.

The data were analyzed by content analysis using Maxqda software. Downe-Wambolt (1992, p. 314) defines the content analysis as a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena. The four main stages of content analysis are the decontextualisation, the recontextualisation, the categorization, and the compilation. In the first stage, the text was read, and each relevant segment of data attached to a code that relevant to the research question. This process is known as the "open coding process". The second step is the recontextualization of the data.

The coded area of the text was re-checked. The unmarked text and its relation to the purpose of the study were controlled. Data that were not relevant to the research were discarded. The third step is categorization. The codes were categorized. The last step is the compilation. At this stage, a summary of the themes, categories, and codes is represented in a table.

A field expert analyzed the data with the same process. The coding and the created themes and categories were reviewed with the field expert. After reaching a consensus, the findings were interpreted, and conclusions were presented.

Validity and reliability studies in qualitative research differ from quantitative research. The criteria for validity and reliability in qualitative research can be explained as being transparent at every stage of the research, explaining the procedures in detail and reporting the data in detail (Yıldırım & Şimşek, 2008). In this study, care was taken to explain the procedures in detail throughout the process. At the point of ensuring internal reliability, cooperation was made between the coders and calculated by taking common opinions. The data collected during the research process were coded separately by the researchers as written texts, and the consensus between the researchers was calculated as 0.92 by taking into account the similar and different coding within the framework of consensus. At the point of ensuring external reliability, the characteristics of the participants should be defined, limitations should be explained and the process of collecting and analyzing the data should be mentioned (Yıldırım & Şimşek, 2008). In this direction, these processes were explained separately under appropriate headings within the scope of the research and external reliability was tried to be ensured in this way.

Compliance with Ethical Standard

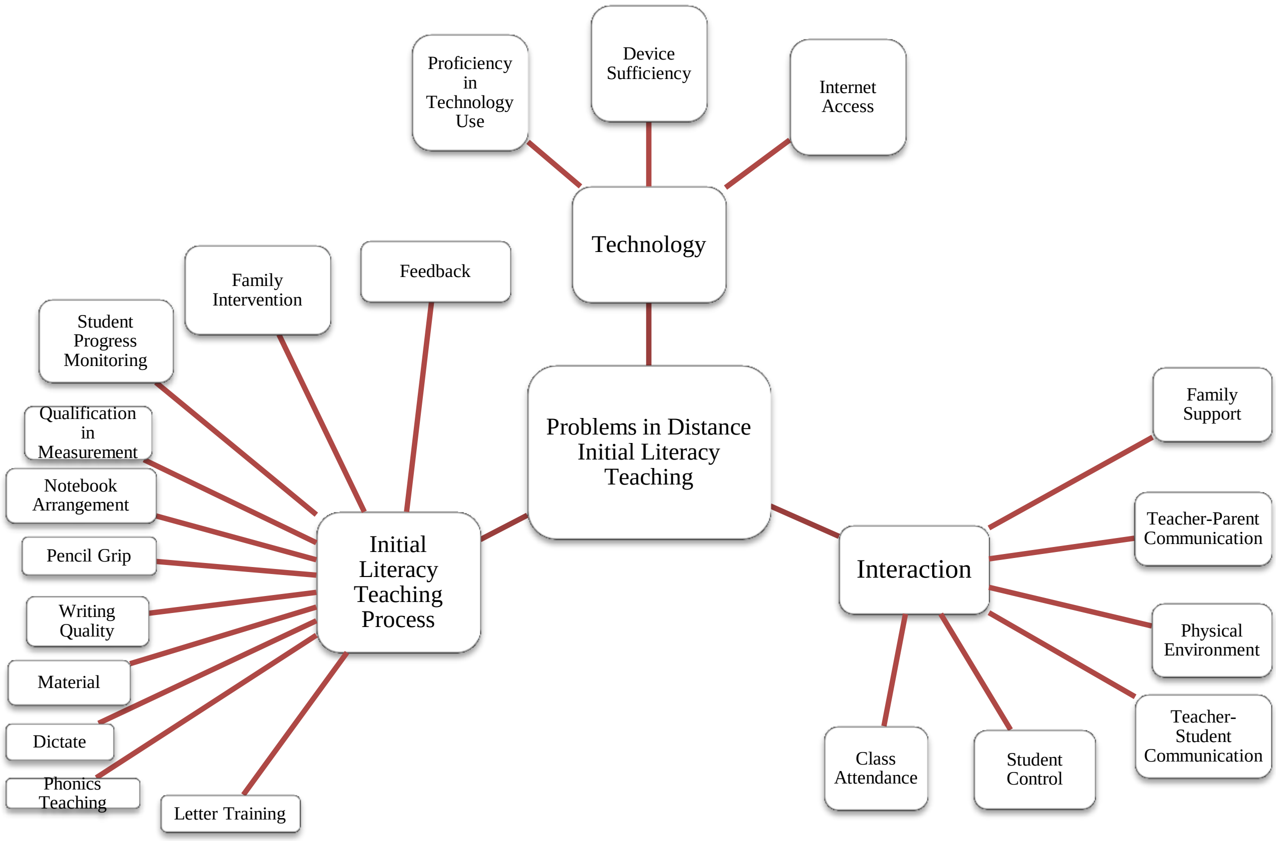
Ethics committee approval was received for this study from the ethics committee of Sakarya University (Date: September 20, 2023, Number: E-61923333-050.99-284514). The purpose of the study was explained to the participants. Informed consent forms were signed by all participants.

Findings

The six questions asked to the participants, the findings of the study are grouped under three themes.

Figure 1

Problems Encountered in Distance Initial Literacy Teaching during the Pandemic Period



The answers given by the classroom teachers to the problems they experienced in the initial literacy teaching process with distance education during the pandemic period were analyzed. The findings were grouped under three themes: "Technology", "Interaction" and " Initial Literacy Teaching Process."

Classroom teachers stated that they experienced technology-based problems in initial literacy teaching to students in the distance education process.

Table 1

Classroom Teachers' Opinions on the Technology Theme

Codes of the Technology Theme	f
Internet Access	10
Device Sufficiency	9
Proficiency in Technology Use	5

Table 1 shows the opinions of classroom teachers on the problems relating to technology. The data were categorized into the codes of " Proficiency in Technology Use", " Device Sufficiency" and "Internet Access".

Classroom teachers reported that students and parents had problems with internet access and technology use. They stated that there are parents without the required devices for distance education. Sample statements of classroom teachers regarding these problems are below:

"Both the student and parents do not know how to use a computer.", *"Connection problems were experienced on mobile phones*" (T1).

"*There were students not having a computer*" (T4).

"*Most of students did not have a internet access*" (T2).

Classroom teachers stated that interaction problems were encountered in the process of initial literacy teaching in distance education.

Table 2

Classroom Teachers' Opinions on the Interaction Theme

Codes of the Interaction Theme	f
Class Attendance	14
Family Support	6
Teacher-Parent Communication	5
Physical Environment	2
Teacher-Student Communication	2
Student Control	2

Table 2 shows the opinions of classroom teachers on the problems relating to interaction. Students' non-attendance, poor family support, teacher-parent communication problems, inappropriate physical environment, communication problems, and difficult control over students from a distance were reported as problems. Sample statements of classroom teachers regarding these problems are below:

"*Students attend the lessons they like and do not attend the lessons they do not like*" (T1).

"There was a disconnection as not all students attended the lesson" (T5).

"*Communication has decreased with parents, which is a connection between teacher and the student*" (T11).

"*Although I recorded and uploaded letter training videos, I only had 2 parents watching and teaching at home*" (T6).

"*Most parents fully got involved and encouraged students during this period but some of them continued to a certain time, and some of them were not interested at all*" (T10).

Classroom teachers stated that they experienced problems in initial literacy teaching during distance education process.

Table 3

Classroom Teachers' Opinions on the Theme of Initial Literacy Teaching Process

Codes of the Initial Literacy Teaching Process	**f**
Feedback	4
Student Progress Monitoring	3
Material	3
Letter Training	2
Phonics Teaching	2
Dictate	2
Qualification in Measurement	2
Writing Quality	2
Pencil Grip	2
Notebook Arrangement	2
Family Intervention	1

Table 3 shows codes that classroom teachers' problems in initial literacy teaching. Unable to giving feedback, having difficulties in monitoring students progress, and lack of lesson materials are the most significant problems. They also stated that they had problems with letter training, phonics teaching, dictation and assessing students' academic achievement. They reported that some students gripping pencil incorrectly, problems in notebook arrangement, and sometimes parents made wrong interventions. Sample statements of classroom teachers regarding these problems are below:

"*Some negative behaviors turned into permanent as students could not get warnings immediately to correct their mistakes*" (T9).

"*It is hard to determine the level that students got*" (T3).

"*The materials for the lesson were insufficien.*" (T5).

"*Mistakes were made in the writing of the letters*." (T3).

"*We had serious problems with pencil grip*" (T2).

"*Although I showed the letters and practiced them, I could not make them grasp the direction of the letters and the notebook arrangement*" (T1).

"My students had difficulty in doing the activity of combining sounds" (T8).

Discussion and Results

Six questions in the interview form were used to obtain the opinions of first-grade primary school teachers about the problems encountered in the initial literacy teaching through distance education during the COVID-19 pandemic. Answers are analyzed in the Maxqda program and grouped under three themes. Bu nedenle bulgular bu üç tema çervevesinde sunulmuştur. The results of the study are grouped under the themes of “Technology", "Interaction" and "Initial Literacy Teaching Process".

Teachers encountered "technology" based problems in initial literacy teaching during the pandemic period. First-grade students experienced internet access problems affects the lesson's flow and students' attention negatively. Students do not have a computer, tablet, etc. of their own to use. Both students and parents do not have enough proficiency in technology use. These problems may have been caused by the compulsory shift to distance education in a short period of time and giving parents and teachers a very limited preparation time. Erbaş (2021) and Gürbüz and Yılmaz (2021) stated that there are problems in internet connection and students do not have educational Technologies although EBA, Zoom and Youtube platforms are used in the process of teaching primary literacy as similar as finding of this study. Şahin and Kalaycıoğlu (2021) stated that the problems related to internet infrastructure and quality and device-related problems are the main system-based problems in the distance education process. Gürbüz and Yılmaz (2021) reported that most first-grade teachers had problems with internet access during the initial literacy teaching during the pandemic. Aktaş and Çoban Sural (2023) stated that common problems of first-grade teachers and parents in the initial literacy teaching with distance education were internet access, poor internet infrastructure, and technical problems (not having a device).

Interaction is another theme of research findings. Classroom teachers reported that most of the students did not attend class regularly. Weak and limited family support and parents' poor communication with the teacher caused problems. Teacher-parent communication is essential for a successful learning process. Classroom teachers stated that they had problems communicating, and controlling students was difficult. Another problem is that most of the students' home conditions had a negative effect on the lesson process. Erbaş (2021) stated that some parents were uninterested and ignored the student's attendance to the lessons. Gürbüz and Yılmaz (2021) reported that most first-grade teachers had problems with family collaboration during the initial literacy teaching during the pandemic. Aktaş and Çoban Sural (2023) reported that teacher-parent-student communication was affected negatively in the distance education.

Classroom teachers stated that the initial literacy teaching was extremely difficult during the pandemic period. Teachers expressed that they had problems in monitoring students progress and giving feedback. These problems made it difficult to intervene with students gripping the pencil incorrectly, having problems with notebook arrangement, confusing the writing direction of the letter, and having difficulty recognizing the sound. The materials for learning were missing for many of the students making these problems worse. Erbaş (2021) also found that first-grade teachers who taught initial literacy teaching during the pandemic period had the most difficulty in the steps of combining sounds into syllables and combining syllables into words. Özcan and Saydam (2021) stated that students struggled with gripping the pen correctly, writing letters and the correct form of text in addition, dictating syllables, words, and sentences during the first literacy teaching process with distance education. Aktaş and Çoban Sural (2023) stated that students; could not achieve reading fluency and reading comprehension skills and phonics teaching was completed later in distance education compared to face-to-face education. The sound or internet access problems in computers caused problems about sound learning in letter teaching. It is difficult to teach pen-gripping, notebook arrangement, hearing and repeating sounds clearly, and writing as shown by the teacher through online platforms. It is affected by many factors, such as the strength and quality of the technological infrastructure, the qualities of the online platforms, and the proficiency of the teacher and the student in using technology. To overcome the problems in the distance education process, all education stakeholders of the education system must act in unity, be trained and supported technologically.

As a result, many problems were experienced in teaching reading and writing remotely during the epidemic period. It has been determined that classroom teachers experience technological problems (internet access, lack of devices required for distance education, insufficient use of technology). Problems in terms of interaction (lack of teacher-parent, teacher-student communication, absenteeism, difficulty in student control, insufficient family support) were expressed. In the first reading and writing learning-teaching process, there was a lack of teaching materials, holding the pen incorrectly, problems with teaching letters and sounds, inability to take dictation, notebook disorganization, difficulty in following student development, inadequacy of students' physical environments, inability to give qualified feedback, problems in measuring academic success, misunderstandings of families. Intervention problems have been identified.

These problems experienced in distance primary literacy teaching have revealed the lack of technological infrastructure and technological literacy. The need to design distance education as a system that will make teacher-student-parent communication effective has been identified. The need to design primary literacy distance education materials in a way that facilitates both teaching and measurement and evaluation has emerged. It has also been observed that there is a need for parents to receive training on how to support their students.

Naturally, primary school students, teachers, and parents who experience the distance education process for the first time will encounter difficulties in this process. It is a fact that international problems such as the epidemic deeply affect education systems and system discussions in education also arise. Distance education has taken its place as an alternative or supportive educational practice at all levels of education.

Recommendations

Pandemics are the world's most serious problems. Education systems need to be revised against such problems that affect all of humanity educational administrators of education system should take precautions. Such research is crucial for reflecting the opinions of the classroom teachers involved in the process. Based on the results of the study, the following suggestions can be considered:

- Educational tools such as computers, tablet computers, etc. can be made accessible to everyone. Principals can provide the opportunity to acquire educational technologies for teachers and students.
- Internet access is necessary for the widespread use of educational technologies, sharing information, and have access to synchronous and asynchronous education.

Internet access can be considered a basic need, and all students, teachers, and principals can be provided internet for free and without any problems.

- Trainings on the use of technology can also be generalized for parents and students.
- Applications and digital platforms can be developed and integrated into the education system to simplify student-teacher parent-teacher communication in the distance education.
- Parents can be trained on what kind of support a primary school student may need and how to provide it.
- Interactive softwares and programs can be provided to ease initial literacy teaching through distance education.
- Online platforms can be developed that can be easily used by students and parents, where teachers can give feedback, measurement and evaluation can be done.

Compliance with Ethical Standard

Ethics committee approval was received for this study from the ethics committee of Sakarya University (Date: September 20, 2023, Number: E-61923333-050.99-284514).

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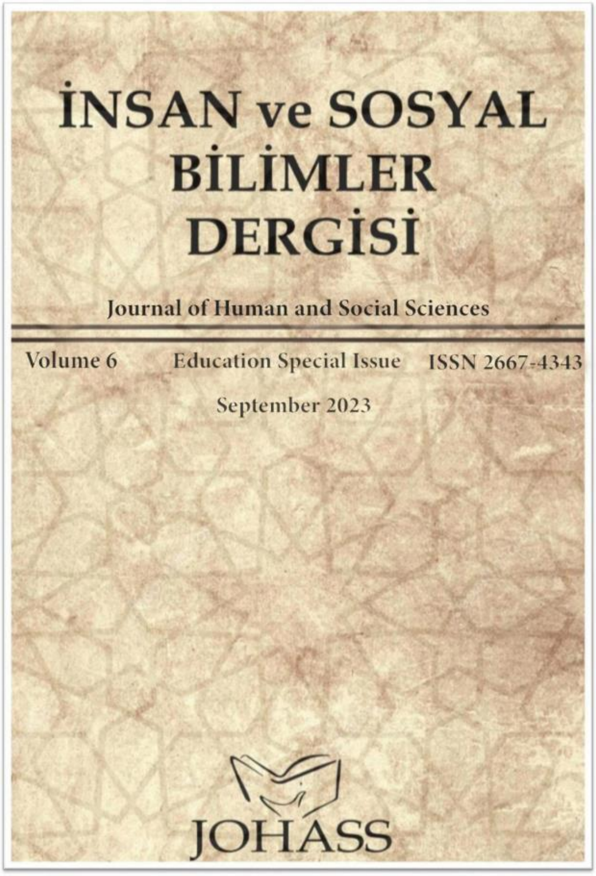

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The Relationship Between Teachers' School Happiness, Organizational Commitment, and Self-Efficacy

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The Relationship Between Teachers' School Happiness, Organizational Commitment, and Self-Efficacy

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Abstract

The purpose of this research is to reveal the relationship between teachers' perceptions of organizational commitment, school happiness, self-efficacy. In the study, data collection was conducted using the "Organizational Commitment Scale" adapted into Turkish by Han, Dağlı and Elçiçek (2018), the "School Happiness Scale" developed by Sezer and Can (2019), and the "Teachers' Self-Efficacy Scale" adapted into Turkish by Karaoğlu (2019), along with a personal information form developed by the researchers. The relational scanning method was used in the study. The sample of the study consists of 516 teachers working in different types and levels of schools in the Avcılar district of Istanbul, determined by the maximum diversity sampling method. The collected data were analyzed using the SPSS 27.0 software package, employing normality tests, t-Test, and One-Way Analysis of Variance (ANOVA). A relational (correlational) design was employed in the study to determine the relationship between teachers' perceptions of organizational commitment, school happiness, and self-efficacy, and a multiple regression analysis was used to determine the effect of organizational commitment and self-efficacy variables on school happiness. A moderate (r=0.559) and significant (p<0.05) relationship was identified between teachers' school happiness and organizational commitment. A low-level (r = .177; r= .105) and significant (p< .05) relationship was determined between teachers' perception of self-efficacy, school happiness, and organizational commitment. The result of the multiple linear regression analysis revealed a significant relationship (R= .572, R^2= .327) between teachers' perceptions of organizational commitment and self-efficacy with school happiness ($F_{(2,513)}$ = 124.524, p < 0.00). While significant differences were found between groups in terms of gender, seniority, school of employment, class size, and field of study variables, no difference was found between groups for age, education level, and socio-economic status variables.

Keywords: School happiness, organizational commitment, self-efficacy, teacher

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Introduction

Education is one of the most defining aspects of an individual's life. The role of teachers is important in the academic and social development of students in the educational process. However, for teachers to effectively fulfill this role, it is anticipated that their perceptions of organizational commitment, organizational happiness, and self-efficacy should be high. These concepts can directly influence teachers' professional performance, job satisfaction, productivity, and positive impact on students. Organizational commitment reflects an individual's relationship with the institution they work for and their internalization of its values. It has been observed that teachers with high commitment provide more support to school vision and student achievement. The perception of self-efficacy indicates a teacher's belief in successfully accomplishing a task, which has implications ranging from student motivation to classroom management. Organizational happiness represents a teacher's job satisfaction, and this sentiment shows a close relationship between organizational commitment and self-efficacy; suggesting that teachers with high happiness are more dedicated to their profession and effectively support student success.

The foundation of organizations is people, and happiness is one of the main objectives of humans (Diener, 1984). Happiness is characterized by high positive emotions and life satisfaction. Organizational commitment is the desire of organizational members to realize the organization's goals, exert effort beyond expectations for the benefit of the organization, and continuously work within it (Arman and Tan, 2018). Teachers' self-efficacy beliefs alter their efforts, objectives, and levels of aspiration (Tschannen-Moran and Hoy, 2001). Individuals with high self-efficacy exert more and prolonged effort, being less affected by adversities compared to those with low self-efficacy (Scholz et al., 2002). Teachers' organizational commitment can enhance school happiness. At the same time, their self-efficacy perceptions, which express confidence in themselves and belief in their abilities, increase their desire to work for the benefit of the organization, thereby elevating their organizational commitment (Bandura, 1994).

Teachers with high organizational commitment are expected to demonstrate high performance in their schools, take on more responsibilities, and be more harmonious and productive, which is directly proportional to organizational happiness (Bakan, 2018). Employees who feel good and are happy are expected to have an increased organizational commitment. It is believed that there is a significant relationship between organizational happiness and commitment (İncekara, 2020). The perception of self-efficacy can assist teachers in being successful in their jobs and in enhancing their organizational commitment. A high level of self-efficacy can positively and directly influence increased organizational commitment.

Organizational Happiness

The sensation of success in desired pursuits, happiness is the pleasure derived from life and cognitively attained satisfaction (Beceren, 2012; Warr, 2007). Fisher (2010) defines happiness as a pleasant mood, well-being, positive emotions, and attitudes. Being happy in the workplace, where one spends a significant portion of life, is vital. Organizational happiness is expected to influence individual happiness. This is because one of the significant factors affecting individual happiness is organizational happiness (Gavin & Mason, 2004). Organizational happiness is the collaborative effort level expended in realizing individual and organizational goals; it's the congruence between the accomplishment levels of a person's goals and the organization's goals (Bulut, 2015). The level of organizational happiness can vary based on workplace happiness, individual, and collective levels (Fisher, 2010). With the increasing number of people spending most of their lives at work, workplace happiness is becoming more critical (Helliwell., Layard & Sachs, (Ed). 2017).

The factor most influencing organizational happiness is how an individual perceives and interprets events (Brandstatter, 1994). A happy person is successful in their tasks, social, optimistic, can demonstrate superior performance, is faithful, and has high self-confidence (Diener et al., 1999). When assessing individual happiness, employees' commitment to their job and the organization is considered. Happiness encompasses the experiences of individuals, attitudes, cooperative behaviors, abstract factors, job-related situations, and organizational context (Bozkaya, 2023).

The mindset that allows an individual to reach their potential is happiness (Jones, 2010). Commitment is an evolved form of happiness (Aksoy, 2015). A high level of commitment among working individuals will increase their effort for organizational success and make them love and embrace their work (Dikmen, 2012). In organizational environments where human interactions are most intense, people contribute to the organization's objectives. Happy and content organizational employees' participation in organizational activities enhances their commitment levels (Döş, 2013).

Organizational Commitment

Commitment is a multifaceted concept that can be directed towards various goals and is typically divided into three main categories: commitment to the organization, the work group, and the task (Besser, 1993; Meyer, Stanley, & Parfyonova, 2012). Organizational commitment is defined as behaviors manifested due to an individual's bond to the organization, encompassing the desire to remain affiliated, accept its goals and values, work towards its objectives, and have the aspiration to stay within the organization (Boylu et al., 2007; Durna & Eren, 2005; Nartgün & Menep, 2010; Robbins & Coulter, 2003). Organizational commitment illustrates how attached an individual is to an organization and to what extent they identify with it (Steers, 1977). This represents a psychological bond formed between the individual and the organization, expressing the employee's loyalty to the institution and the interest other employees have in it (Lee, Carswell & Allen, 2000; Tella, Ayeni & Popoola, 2007). A decrease in employees' organizational commitment diminishes their interest in the institution, reduces performance and productivity, and increases the likelihood of them leaving the job (Terzi & Koçoğlu-Sazkaya, 2020).

In educational institutions like schools, the commitment of teachers and educational staff to their schools has been addressed in numerous studies, based on organizational commitment theory (Akyürek, 2023). Teachers' commitment to the school plays a crucial role in school effectiveness, their willingness to strive for the school, and their desire to continue working there, as well as their acceptance of the school's educational goals and values. This is because a sense of commitment fosters motivation from tasks accomplished and successes achieved (Balay, 2000; Balay, 2014). Teachers' commitment to the school they work for and their happiness there are contingent upon the congruence of their personal values with organizational values, and the level of emotional bond they establish with the organization. Work-related behaviors of a teacher with high self-efficacy, such as performing tasks with passion and establishing good relationships with colleagues, will ensure organizational happiness (Uyaroğlu, 2019). Teachers' commitment to students, teaching, and the school supports students' success in education and helps the school achieve its overall objectives. Such commitment encourages teachers to utilize various teaching methods, play an active role in the school, and contribute to the school's development.

Self-Efficacy

Teachers possessing elevated self-efficacy demonstrate significant dedication to their professional pursuits (Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). Teachers with a high sense of self-efficacy respond to challenges with renewed efforts (Ross and Bruce, 2005). According to Bandura, the belief in self-efficacy is about performing behaviors necessary to achieve specific goals (Schmitz & Schwarzer, 2000). Teachers with high self-efficacy tend to be more oriented towards their profession and have higher levels of satisfaction (Schmitz, 2000). A teacher's belief in their ability to achieve desired learning outcomes for their students is termed self-efficacy belief (Tschannen-Moran and Woolfolk-Hoy, 2001; cited in: Çapri & Kan, 2006). Working in a conducive environment positively affects teachers' perceptions of competence (Kurt, 2012). Understanding and enhancing teacher behavior in instruction will benefit from the belief in self-efficacy. Their willingness and happiness in teaching will depend on their ability to meet the competencies required by the teaching profession (Yılmaz and Gürçay, 2011).

One of the paramount factors determining the quality of education is teachers' happiness, which is of utmost importance to the schools where they work. Schools are organizations that value and aim for organizational happiness. Teachers' organizational happiness affects their professional knowledge and skills, organizational trust, individual happiness, and organizational commitment (Gürbüz, 2020; Koç, 2020; Field & Buitendach, 2011; İncekara, 2020; Ataç., Yüksel., Dursun, and Özgenel, 2022). The happiness of schools as organizations differs from organizational happiness because it relates to individual, social, and physical factors and depends on whether teachers are happy. Being happy in a school environment for a teacher can be seen as improving self-efficacy, peer support, and the ability to establish a positive communication environment (Bird and Markel, 2012).

Defining teacher competencies related to teachers is crucial in solving the negatives and qualitative problems they experience. Arrangements that will psychologically bind teachers to their professions and lead to the development of positive emotions should be prioritized (Tedmem, 2014). Organizational commitment is much more than just feeling connected to the institution. Individual determinants, encompassing job anticipations, psychological contracts, and inherent traits, combined with organizational elements like job caliber and significance, managerial practices, compensation scale, oversight, institutional culture, organizational equity, institutional incentives, collaborative efforts, role vagueness, and conflicts, collectively impact organizational allegiance. Especially emotional commitment, resulting from the harmony of individual and organizational values that connect employees emotionally to the organization, affects organizational happiness (Stephens, 2004). The right to express the feelings and thoughts of organization members openly without hesitation is seen as one of their most natural rights (Durak, 2018). In conclusion, the perception of self-efficacy can be an important factor for school success in the nexus pertaining to organizational commitment and school happiness.

Teachers' happiness in educational institutions, their organizational commitment, and perceptions of self-efficacy are crucial factors that can directly affect their professional success and student achievement. Especially in the educational environment of the 21st century, the challenges and expectations faced by teachers play a significant role in these elements. Research worldwide shows that teachers' perceptions of self-efficacy have a positive effect on adopting pedagogical approaches that can increase student success, ability to enhance student motivation, and classroom management skills. On the other hand, teachers' organizational commitment has a profound effect on their loyalty to educational institutions, intentions to quit, and professional satisfaction. School happiness can also affect the quality of teachers' professional life and student achievement. This study aims to examine the relationships between teachers' school happiness, organizational commitment, and perceptions of self-efficacy. Understanding the relationship between these three factors will contribute to the development of education policies and practice. It plays a critical role for education administrators and decision-makers in creating strategies to support teachers and promote their professional development. Although the literature has provided some studies on this subject, very few studies comprehensively examine the relationships between these three factors. Therefore, this research is essential as it will contribute to a deeper understanding of the relationships between teachers' school happiness, organizational commitment, and perceptions of self-efficacy.

Objective

The objective of this study is to ascertain the influence of educators' perceptions of self-efficacy on the correlation between their organizational allegiance and scholastic well-being. Pursuant to this objective, the ensuing inquiries have been postulated:

- What are the opinions related to teachers' perceived organizational commitment and organizational happiness?

- What is the nature of the relationship between educators' scholastic well-being and and their perceived organizational commitment?
- Does teachers' perceived self-efficacy predict the relationship between their organizational commitment and organizational happiness?

Method

Model

This research endeavors to scrutinize the nexus between university-wide general procrastination, academic procrastination, and patience behaviors, considering an array of diverse variables, while elucidating the prevailing circumstances. Therefore, it has been shaped using the correlational scanning model from general scanning methods of quantitative research methods. The scanning model explains exactly how we see a situation and includes processes on how desired behaviors will be developed in individuals. In general scanning, a whole or part of a group is examined to reach a general conclusion. The correlational scanning model tries to determine whether there is a connection between two or more variables. In this model, how variables change together is researched (Karasar, 2023). A correlational design has been used to determine the relationship between university students' general procrastination, scholastic postponement, and patience behaviors. Correlation studies aim to illuminate specific human behaviors and predict their potential outcomes by examining simultaneous variations of more than one variable (Cohen, Manion & Morrison, 2000; Fraenkel & Wallen, 2009). Additionally, multiple regression analysis was employed to ascertain the influence of the patience variable on both general and scholastic postponement. Regression analysis represents an extensive statistical technique utilized for quantifying associations among several variables. This analysis examines the relationship between one dependent variable and one or more independent variables. If only one dependent variable is examined in relation to two or more independent variables, this is called multiple regression analysis (Büyüköztürk, 2018).

Population Sample

The population of this study consists of 3,845 teachers working in 115 public schools within the Avcılar district of Istanbul (Ministry of National Education [MEB], 2023; https://avcilar.meb.gov.tr/). The study's sample was derived via stratified random sampling, a technique within the realm of probability sampling methodologies. 560 teachers volunteered to participate in the study. 112 (35%) of the teachers are male, while 208 (65%) are female.

Data Collection Tools

The intent to ascertain the perceived self-efficacy in the relationship between organizational commitment and school happiness, three different scales have been used in this study. The initial segment of the scale utilized in this research solicited participants' gender information, professional seniority, conjugal status, educational level, and duties. The second part used the organizational commitment scale, which was adapted into Turkish by Dağlı, Elçiçek, and Han (2018) from the original version by Balcı (1993), with a Cronbach's Alpha coefficient of .876. In the present research, the Cronbach's Alpha coefficients for the scale were determined to be .944. In the third section, the school happiness scale developed by Sezer and Can (2019) was used. The original scale consists of 36 items, which were later shortened to 12 items by Sezer and Can (2019) after validity and reliability studies. The scale exhibits a reliability coefficient of .93. within the context of this research, the Cronbach's Alpha coefficient for the scale was ascertained to be .906. The final part of the data collection tool used the self-efficacy scale developed by Karaoğlu (2019). The scale was translated into Turkish by Karaoğlu (2019). The Cronbach's Alpha value of the scale is .90. In this study, the Cronbach's Alpha coefficient of the scale was found to be .880.

Analysis of Data

In this study, given the incorporation of multiple scales within a singular survey and the concurrent evaluation of all scales by participants, Harman's single factor analysis was employed to investigate potential common method variance (Podsakoff et al., 2003). Should the predominant factor of the scale elucidate less than 50% of the total variance, the scale is not subjected to common method bias (Fuller et al., 2016). Given that a solitary factor in the scale accounted for a variance of merely 31.751%, the scale is devoid of common method bias. Data analysis was conducted utilizing the SPSS 27 statistical software package. To determine which statistical method to use to analyze the data, the normality status of the data obtained from the data collection tools used in the research was checked. A correlational design was used in the research to determine the relationship between university students' general procrastination, academic procrastination, and patience behaviors. Multiple regression analysis was also used in the research to determine the effect of the patience variable on general and academic procrastination. The independent sample t-test, ANOVA, and Post-Hoc (LSD) were used to determine the significant difference status according to the data obtained with the personal information form.

Compliance with Ethical Standard

In this study, all rules were complied with within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive". In addition, for this study, Kırşehir Ahi Evran University Social Sciences Research and Publication Ethics Committee numbered 2023/08/03 ethics committee approval was obtained.

Findings

In this segment of the research, the outcomes derived from the data analysis are delineated.

Normality Distribution

Before proceeding to the data analysis phase of the study, analyses regarding the normality distribution of the Teacher Self-Efficacy Perception Scale, School Happiness Scale, and Organizational Commitment Scale were conducted. The results of the respective analyses are detailed in Table 1 below.

Table 1

Normality Distribution of the Teacher Self-Efficacy Perception Scale, School Happiness Scale, and Organizational Commitment Scale

	N	$\bar{X}$	Median	Skewness	Kurtosis	P
Teacher Self-Efficacy Perception Scale	516	7.74	7.75	.104	-.983	.00
School Happiness Scale	516	3.82	3.84	-.219	-.240	.00
Organizational Commitment Scale	516	3.41	3.38	-.065	-.066	.05

Table 1 presents the kurtosis and skewness values for the Teacher Self-Efficacy Perception Scale, School Happiness Scale, and Organizational Commitment Scale directed at teachers. As Büyüköztürk (2007) pointed out, the closeness of the mode, median, and arithmetic mean indicates that the data is normally distributed. For the Teacher Self-Efficacy

Scale, the median value is 7.75 and the arithmetic mean value is $\bar{X}$ = 7.74. For the School Happiness Scale, the median is 3.84 and $\bar{X}$ = 3.82, while for the Organizational Commitment Scale, the median is 3.38 and $\bar{X}$ = 3.41. It is noteworthy that in these scales used in the research, the median and arithmetic mean values are close to each other, indicating the realization of the normality assumption. Büyüköztürk (2007) emphasized that for the data to be normally distributed, the kurtosis and skewness values should be between +1 and -1. In light of this information, the data set was analyzed, and statistical methods appropriate for normal distribution were used in the research.

Table 2

Demographic Information of Participants

	Variables	**Frequency *(f)***	**Percentage *(%)***
Gender	Female	375	72.7
	Male	141	27.3
	Total	516	100.0
Professional Seniority	1 - 6 Years (Y)	103	20.0
	7 - 12 Years	110	21.3
	13 - 18 Years	95	18.4
	19 - 24 Years	88	17.1
	25 Years and Above	120	23.3
	Total	516	100.0
Age	20 - 29 Y	65	12.6
	30 - 39 Y	179	34.7
	40 - 49 Y	160	31.0
	50 Y and Above	101	19.6
	Total	505	97.9
Type of School Serving	Primary School (Sc)	194	37.6
	Middle School	142	27.5
	Vocational High School	74	14.3
	Academic High School	106	20.5
	Total	516	100.0
Education Level	Associate Degree (Dg)	11	2.1
	Bachelor’s Degree	397	76.9
	Graduate Degree	108	20.9
	Total	516	100.0
Socio-Economic Status	Low	38	7.4
	Medium	457	88.6
	High	21	4.1
	Total	516	100.0
Average Class Size in Your School	0 - 10 Students (St)	25	4.8
	11 - 20 Students	76	14.7
	21 - 30 Students	185	35.9
	31 - 40 Students	178	34.5
	41 - 50 Students	52	10.1
	Total	516	100.0
Teaching Subject (Field of Expertise)	Foreign Languages (English, German, Russian, French)	51	9.9
	Social Sciences (Social Studies, History, Geography)	145	28.1

Elementary Teaching - Preschool/Child Development	125	24.2
Mathematics - Science (Physics, Chemistry, Biology) - IT	89	17.2
Physical Education- Arts (Visual Arts, Music) - Counseling	53	10.3
Vocational Courses	53	10.3
Total	516	100.0

Table 2 provides demographic information about the participants. According to this table, 375 of the participants (72.7%) are female, while 141 (27.3%) are male. When the distribution of participants by professional seniority is examined, it is determined that 103 (20.0%) have been in the profession for 1-6 years, 110 (21.3%) for 7-12 years, 95 (18.4%) for 13-18 years, 88 (17.1%) for 19-24 years, and 120 (23.3%) for 25 years or more. As for their ages, 65 participants (12.6%) are between 20-29 years old, 179 (34.7%) are between 30-39, 160 (31.0%) are between 40-49, and 101 (19.6%) are 50 or older. In terms of the type of school they serve, 194 (37.6%) are in primary schools, 142 (27.5%) are in middle schools, 74 (14.3%) are in vocational high schools, and 106 (20.5%) are in academic high schools. The distribution of participants by their education level is as follows: 11 (2.1%) have an associate degree, 397 (76.9%) have a bachelor's degree, and 108 (20.9%) have a graduate degree. Regarding socio-economic status, 38 participants (7.4%) have a low status, 457 (88.6%) have a medium status, and 21 (4.1%) have a high status. In terms of the average class size at the schools where the participants work, 25 (4.8%) teach classes with 0-10 students, 76 (14.7%) with 11-20 students, 185 (35.9%) with 21-30 students, 178 (34.5%) with 31-40 students, and 52 (10.1%) with 41-50 students. When examining the distribution by their subject areas, 51 participants (9.9%) teach foreign languages, 145 (28.1%) teach social sciences, 125 (24.2%) are elementary teachers or specialize in preschool/child development, 89 (17.2%) teach mathematics, science subjects, or IT, 53 (10.3%) teach physical education, arts, or counseling, and 53 (10.3%) teach vocational courses.

Findings from the Pearson Correlation Analysis on the Relationship Among Teachers' Perceived Self-efficacy, School Happiness, Organizational Commitment Levels

To determine the relationship between teachers' perceived self-efficacy, school happiness, and organizational commitment levels, Pearson Correlation Analysis was employed. The findings obtained are presented in Table 3.

Table 3

Pearson Correlation Analysis on The Relationship Among Teachers' Perceived Self-Efficacy, School Happiness, and Organizational Commitment Levels.

		Perceived Self-Efficacy	School Happiness	Organizational Commitment
Perceived Self-Efficacy	Pearson r	1	.177**	.105*
	P		.000	.018
	n		516	516
School Happiness	Pearson r		1	.559**
	P			.000
	n			516
Organizational Commitment	Pearson r			1

*Correlation is significant at p<.05 level. ** p<.01

A moderate (r=0.559) and significant (p<0.05) relationship was identified between teachers' school happiness and organizational commitment. This means that participants' school happiness and organizational commitment increase together with a strong relationship. The variance that the variables explain over each other is 31%. That is, 31% of teachers' organizational commitment might be due to overall school happiness.

A low (r = .177; r= .105) and significant (p< .05) relationship was identified between teachers' perceived self-efficacy, school happiness, and organizational commitment. According to this result, teachers' perceived self-efficacy is positively influenced at a low level and significantly by their school happiness and organizational commitment.

Findings from the Multiple Linear Regression Analysis on the Relationship Among Teachers' Perceived Self-Efficacy, Organizational Commitment, School Happiness Levels

A multiple linear regression analysis was conducted to reveal how perceived self-efficacy and organizational commitment, which are believed to influence teachers' school happiness, predict it. The findings are presented in Table 4.

Table 4

Multiple Linear Regression Analysis on The Relationship Among Teachers' Perceived Self-Efficacy, Organizational Commitment, and School Happiness Levels

Variables	B	Standard Error	β	t	p	Bivariate r	Partial r

Constant	1.418	.228		6.211	.000		
Organizational Commitment	.503	.034	.547	15.004	.000	.559	.552
Self-Efficacy	.089	.027	.120	3.296	.001	.177	.144

$R = .572$ $R^2 = .327$ $F_{(2,342)} = 124.524$ $p < 0.00$

Multiple linear regression analysis was conducted to determine how perceptions of organizational commitment and self-efficacy, believed to influence teachers' school happiness, predict school happiness. It was identified that there exists a significant relationship between teachers' perceptions of organizational commitment, self-efficacy, and school happiness ($R= .572$, $R^2= .327$) $F_{(2,342)}= 124.524$, $p < 0.00$). These variables explain 32% of the variance in teachers' school happiness. According to standardized regression coefficients, the relative importance of the predictors on school happiness is in the order of organizational commitment ($\beta= .547$) followed by self-efficacy ($\beta= .120$). Considering the significance tests of the regression coefficients, both variables are seen as significant predictors of school happiness, with p-values of 0.00 and <0.01 respectively. When examining the relationship between predictor variables and school happiness, there are correlations of organizational commitment ($r= .559$) and self-efficacy ($r= .177$).

Findings Regarding the Discrepancy of Teachers' Perception of Self-Efficacy, School Happiness, Organizational Commitment Levels by Gender

To determine whether there is any variance in teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels based on gender, scores obtained from the scale measuring these variables were analyzed using the independent groups t-test. The results of this analysis are elucidated in Table 5.

Table 5

T-test Results on the Differentiation of Teachers' Perception of Self-Efficacy, School Happiness, and Organizational Commitment Levels by Gender

Scale	Gender	n	$\bar{X}$	ss	t	sd	p
Self-Efficacy	Female	375	7.79	.73	2.763	514	.00*
	Male	141	7.59	.78			
School Happiness	Female	375	3.81	.55	-1.003	514	.31
	Male	141	3.86	.57			
Organizational Commitment	Female	375	3.38	.60	-1.769	514	.07
	Male	141	3.49	.60			

*p<.05

It was determined that there is a significant difference in the levels of teachers' perceptions of self-efficacy based on gender ($p<0.05$). Accordingly, female teachers' perceptions of self-efficacy (X̄ = 7.79) are higher than male teachers' (X̄= 7.59). No significant differences were found between the groups regarding school happiness and organizational commitment.

Findings on the Discrepancy of Teachers' Perception of Self-Efficacy, School Happiness, Organizational Commitment Levels by Professional Seniority

To ascertain whether teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels vary based on professional seniority, scores derived from the scale were analyzed via ANOVA. The results of this analysis will be shown in Table 6.

Table 6

ANOVA Results on the Differentiation of Teachers' Perception of Self-Efficacy, School Happiness, and Organizational Commitment Levels by Professional Seniority

Scale	Professional Seniority	*n*	*X̄*	*SD*	*F*	*p*	Source of Difference
Self-Efficacy	1 - 6 Y	103	7,85	,75	1.82	.12	
	7 - 12 Y	110	7,62	,77			
	13 - 18 Y	88	7,72	,71			
	19 - 24 Y	120	7,82	,79			
	25 Y and Above	95	7,67	,70			
	Total	516	7,74	,75			
School Happines	1 - 6 Y	103	4,01	,61	4.49	.00*	1-6 Years > 7-12 Years
	7 - 12 Y	110	3,72	,56			1-6 Years > 13-18 Years
	13 - 18 Y	88	3,72	,49			1-6 Years > 19 – 24 Years
	19 - 24 Y	120	3,82	,55			1-6 Years > 25 Years and Above
	25 Y and Above	95	3,82	,49			
	Total	516	3,82	,55			
Organizational Commitment	1 - 6 Y	103	3,41	,64	.47	.75	
	7 - 12 Y	110	3,35	,65			
	13 - 18 Y	88	3,40	,56			
	19 - 24 Y	120	3,46	,63			
	25 Y and Above	95	3,43	,51			
	Total	516	3,41	,60			

*p<0.05

Table 6 upon examining, it has been determined that there is a significant difference in the views of the participating teachers regarding school happiness based on their professional seniority ($p<.05$). Following the LSD test performed to identify which groups the school happiness varied among, it was found that teachers with a tenure of 1-6 years (X̄ = 4.01) are happier than those with a tenure of 7-12 years and 13-18 years (X̄ = 3.72) and those with 19-

24 years and 25 years or more ($\bar{X}$ =3.82). However, it was observed that the participants' perceptions of self-efficacy and organizational commitment showed similarities based on their professional seniority.

Findings Related to the Discrepancy of Teachers' Perceptions of Self-Efficacy, School Happiness, Organizational Commitment Levels According to Age

To determine whether the levels of teachers' perceptions of self-efficacy, school happiness, and organizational commitment vary according to age, scores obtained from the scale measuring teachers' perceptions of self-efficacy, school happiness, and organizational commitment were analyzed using ANOVA. The results related to this analysis are elucidated in Table 7.

Table 7

ANOVA Test Results Related to The Differentiation of Teachers' Perceptions of Self-Efficacy, School Happiness, and Organizational Commitment Levels Based on Age.

Scale	**Age**	***n***	***$\bar{X}$***	***SD***	***F***	***p***	**Source of Difference**
Self-Efficacy	20 - 29 Y	65	7,90	.24	1.167	.32	
	30 - 39 Y	179	7,67	.20			
	40 - 49 Y	160	7,74	.17			
	50 Y and Above	82	7,75	.22			
	Total	19	7,83				
	20 - 29 Y	505	7,74	.21			
School Happines	30 - 39 Y	65	3,90	.29	1.179	.31	
	40 - 49 Y	179	3,80	.23			
	50 Y and Above	160	3,76	.24			
	Total	82	3,86	.28			
	20 - 29 Y	19	3,96				
	30 - 39 Y	505	3,82	.26			
Organizational Commitment	40 - 49 Y	65	3,28	.41	1.797	.12	
	50 Y and Above	179	3,37	.37			
	Total	160	3,45	.38			
	20 - 29 Y	82	3,51	.40			
	30 - 39 Y	19	3,52				
	40 - 49 Y	505	3,41	.39			

*p<0.05

Table 7 upon examination, it has been determined that there is no significant difference in the participating teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels based on age (p>.05). Similarly, reviewing the scales also indicated that there isn't a meaningful distinction due to age. These results suggest that the participating teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels are distributed homogeneously, irrespective of age.

Findings Related to the Discrepancy of Teachers' Perceptions of Self-Efficacy, School Happiness, Organizational Commitment Levels Based on the Type of School They Work in

To ascertain whether teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels vary based on the type of school they serve in, scores obtained from the scale that measures teachers' perceptions of self-efficacy, school happiness, and organizational commitment were analyzed using ANOVA. The results related to this analysis are elucidated in Table 8.

Table 8

ANOVA Test Results Concerning the Variation in Teachers' Perceptions of Self-Efficacy, School Happiness and Organizational Commitment Levels Based on the Type of School They Work in.

Scale	Type of School Serving	*n*	$\bar{X}$	*SD*	*F*	*p*	Source of Difference
Self-Efficacy	Primary Sc	194	7,86	,70	3.694	.01	Primary School > Middle School Primary School > Academic High School
	Middle Sc	142	7,63	,77			
	Vocational High Sc	74	7,80	,77			
	Academic High Sc	106	7,62	,76			
	Total	516	7,74	,75			
School Happines	Primary Sc	194	3,77	,54	1.617	.18	
	Middle Sc	142	3,90	,53			
	Vocational High Sc	74	3,81	,58			
	Academic High Sc	106	3,82	,59			
	Total	516	3,82	,55			
Organizational Commitment	Primary Sc	194	3,38	,53	1.355	.25	
	Middle Sc	142	3,38	,64			
	Vocational High Sc	74	3,42	,63			
	Academic High Sc	106	3,51	,64			
	Total	516	3,41	,60			

*p<0.05

Table 8 upon examination, it has been identified that there's a significant difference in the perceptions of self-efficacy among the participating teachers based on the type of school they work in (p<.05). As determined through the results of the LSD test to pinpoint which groups exhibited differences in self-efficacy levels, it has been observed that primary school teachers ($\bar{X}$ = 7.86) perceive a higher level of self-efficacy compared to those teaching in middle schools ($\bar{X}$ = 7.63) and academic high schools ($\bar{X}$ = 7.62). However, it was determined that the levels of school happiness and organizational commitment of participating teachers showed similarity regardless of the schools they serve in.

Findings on the Discrepancy of Teachers' Perceptions of Self-Efficacy, School Happiness, Organizational Commitment Levels Based on Their Educational Qualifications

To determine if there's a variance in teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels based on their educational qualifications, scores derived from the scale that measures these perceptions were analyzed using ANOVA. The results from this analysis are elucidated in Table 9.

Table 9

ANOVA Test Results on the Differentiation of Teachers' Perceptions of Self-Efficacy, School Happiness, and Organizational Commitment Levels Based on Their Educational Qualifications

Scale	**Education Level**	***n***	***$\bar{X}$***	***SD***	***F***	***p***	**Source of Difference**
Self-Efficacy	Associate Dg	11	8,03	,50	.909	.40	
	Bachelor's Dg	397	7,74	,75			
	Graduate Dg	108	7,70	,77			
	Total	516	7,74	,75			
School Happines	Associate Dg	11	3,98	,59	1.048	.35	
	Bachelor's Dg	397	3,80	,55			
	Graduate Dg	108	3,87	,56			
	Total	516	3,82	,55			
Organizational Commitment	Associate Dg	11	3,66	,45	1.356	.25	
	Bachelor's Dg	397	3,39	,61			
	Graduate Dg	108	3,45	,60			
	Total	516	3,41	,60			

p<0.05

It was ascertained that among the participating educators, perceptions of self-efficacy, scholastic well-being, and organizational allegiance did not manifest significant variances predicated on their academic qualifications (p>0.05). These results indicate that the participants' perceptions of self-efficacy, school happiness, and organizational commitment levels are distributed homogeneously, irrespective of their educational levels.

Findings on the Discrepancy of Teachers' Perceptions of Self-Efficacy, School Happiness, Organizational Commitment Levels Based on Socio-Economic Status

To ascertain whether teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels vary based on socio-economic status, scores derived from the scale measuring these perceptions were analyzed using ANOVA. The results pertaining to this analysis are elucidated in Table 10.

Table 10

ANOVA Test Results on The Differentiation of Teachers' Perceptions of Self-Efficacy, School Happiness, and Organizational Commitment Levels Based on Socio-Economic Status.

Scale	**Socio-Economic Status**	***n***	$\bar{X}$	***SD***	***F***	***p***	**Source of Difference**
Self-Efficacy	Low	38	7,73	,78	.130	.87	
	Medium	457	7,73	,74			
	High	21	7,82	,84			
	Total	516	7,74	,75			
School Happines	Low	38	3,62	,66	2.708	.06	
	Medium	457	3,83	,54			
	High	21	3,87	,64			
	Total	516	3,82	,55			
Organizational Commitment	Low	38	3,34	,75	.323	.72	
	Medium	457	3,42	,59			
	High	21	3,40	,65			
	Total	516	3,41	,60			

$p<0.05$

Upon scrutiny Table 10, it was determined that the participating teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels do not show significant differences based on their socio-economic status ($p>0.05$). These results indicate that participants' perceptions of self-efficacy, school happiness, and organizational commitment levels are distributed homogeneously irrespective of their socio-economic conditions.

Findings on the Discrepancy of Teachers' Perceptions of Self-Efficacy, School Happiness, Organizational Commitment Levels Based on Class Size

To determine whether teachers' perceptions of self-efficacy, school happiness, with organizational commitment levels vary based on class size, scores derived from the scale measuring these perceptions were analyzed using ANOVA. The results pertaining to this analysis are elucidated in Table 10.

Table 11

ANOVA Test Results on The Differentiation of General Procrastination, Academic Procrastination, and Patient Behavior Based on The Field of Study.

Scale	Average Class Size in Your School	*n*	$\bar{X}$	*SD*	*F*	*p*	Source of Difference
Self-Efficacy	0 - 10 St	25	8.02	.76	1.846	.11	
	11 - 20 St	76	7.85	.76			
	21 - 30 St	185	7.75	.76			
	31 - 40 St	178	7.68	.71			
	41 - 50 St	52	7.62	.79			
	Total	516	7.74	.75			
School Happines	0 - 10 St	25	3.89	.63	3.413	.00	11-20 Students > 21-30 Students 11-20 Students > 31-40 Students 11-20 Students > 41-50 Students
	11 - 20 St	76	4.02	.63			
	21 - 30 St	185	3.81	.55			
	31 - 40 St	178	3.76	.49			
	41 - 50 St	52	3.74	.55			
	Total	516	3.82	.55			
Organizational Commitment	0 - 10 St	25	3.31	.65	.843	.49	
	11 - 20 St	76	3.51	.67			
	21 - 30 St	185	3.37	.63			
	31 - 40 St	178	3.41	.54			
	41 - 50 St	52	3.44	.57			
	Total	516	3.41	.60			

$p<0.05$

Upon scrutiny Table 11, it was discerned that significant disparities exist in educators' perceptions of scholastic well-being based on class dimensions ($p<.05$). The LSD test, which was conducted to determine the variance between which groups concerning school happiness levels, revealed that teachers with class sizes of 11-20 students ($\bar{X}$ = 4.02) are happier than those with 21-30 students ($\bar{X}$ = 3.81), 31-40 students ($\bar{X}$ =3.76), and 41-50 students ($\bar{X}$ =3.74).

Conversely, it was determined that participating teachers' perceptions of self-efficacy and levels of organizational commitment display similarity irrespective of class sizes.

Findings on the Discrepancy of Teachers' Perceptions of Self-Efficacy, School Happiness, Organizational Commitment Levels Based on Field of Study

To determine if the teachers' perceptions of self-efficacy, school happiness, and organizational commitment levels show variance based on their field of study, scores derived from the scale measuring these perceptions were analyzed using ANOVA. The results related to this analysis are presented in Table 12.

Table 12

ANOVA Test Results on the Differentiation of General Procrastination, Academic Procrastination, Patience Behavior Based on the Field of Study.

Scale	Teaching Subject (Field of Expertise)	*n*	$\bar{X}$	*SD*	*F*	*p*	Source of Difference
Self-Efficacy	Foreign Languages (English, German, Russian, French)	51	7,76	,69	6.484	.00	Elementary Teaching - Preschool/Child Development > Social Sciences Teaching - Preschool/Child Development > Mathematics – Science - IT Physical Education- Arts (Visual Arts, Music) - Counseling> Social Sciences Physical Education- Arts - Counseling > Mathematics – Science - IT Vocational Courses > Social Sciences Vocational Courses > Mathematics – Science - IT
	Social Sciences (Social Studies, History, Geography)	145	7,55	,74			
	Elementary Teaching - Preschool/Child Development	125	7,93	,69			
	Mathematics - Science (Physics, Chemistry, Biology) - IT	89	7,54	,72			
	Physical Education-Arts (Visual Arts, Music) - Counseling	53	7,92	,83			
	Vocational Courses	53	7,95	,77			
	Total	516	7,74	,75			
School Happines	Foreign Languages (English, German, Russian, French)	51	3,78	,63	1.302	.26	
	Social Sciences (Social	145	3,87	,52			

	Studies, History, Geography)					
	Elementary Teaching - Preschool/Child Development	125	3,81	,55		
	Mathematics - Science (Physics, Chemistry, Biology) - IT	89	3,72	,57		
	Physical Education-Arts (Visual Arts, Music) - Counseling	53	3,81	,55		
	Vocational Courses	53	3,93	,57		
	Total	516	3,82	,55		
Organizational Commitment	Foreign Languages (English, German, Russian, French)	51	3,43	,62	1.424	.21
	Social Sciences (Social Studies, History, Geography)	145	3,50	,61		
	Elementary Teaching - Preschool/Child Development	125	3,36	,57		
	Mathematics - Science (Physics, Chemistry, Biology) - IT	89	3,35	,66		
	Physical Education-Arts (Visual Arts, Music) - Counseling	53	3,31	,61		
	Vocational Courses	53	3,47	,52		
	Total	516	3,41	,60		

p<0.05

Upon scrutiny Table 12, it was ascertained that a notable variance exists in the self-efficacy perceptions of the participating educators contingent upon their disciplinary specialization (p<.05). According to the results of the LSD test conducted to determine which groups have differences in self-efficacy perceptions: teachers in the primary school teaching - preschool field ($\bar{X}$ = 7.93), social sciences ($\bar{X}$ = 7.55), and mathematics - science - information technologies ($\bar{X}$ = 7.54); physical education - arts - PDR ($\bar{X}$ = 7.92), social sciences ($\bar{X}$ = 7.55), mathematics - science - information technologies ($\bar{X}$ = 7.54); vocational courses ($\bar{X}$ = 7.95), mathematics - science - information technologies ($\bar{X}$ = 7.54), and social sciences ($\bar{X}$ = 7.55) showed higher levels of self-efficacy perception. However, it was determined that participants' school happiness and organizational commitment levels were similar across fields of study.

Discussion and Results

A moderate and significant correlation exists between teachers' scholastic well-being and their organizational allegiance. This result supports the findings in the literature suggesting that the happiness teachers feel at school can positively influence their commitment to the school. This finding aligns with prior scholarly works suggesting that contented educators are potentially more devoted to their respective institutions. On the other hand, a low-level relationship was found between self-efficacy perception and school happiness and organizational commitment. This suggests that the confidence teachers have in their abilities may have a limited effect on school happiness and organizational commitment. Several studies have reported a generally positive and significant relationship between teachers' organizational commitment and self-efficacy perceptions (Betoret, 2009; Ross, 1994; Uzun & Yiğit, 2011; Yüksel, 2003). Teachers' organizational happiness affects their individual happiness (Koç, 2020) and organizational commitment (Field & Buitendach, 2011; İncekara, 2020). Thus, there is consistency between the results of scientific studies focusing on the antecedents and outcomes of teachers' happiness states and this research's results. Another study found a positive relationship between teachers' organizational commitment levels and their organizational happiness (Demircan, 2019).

There is a significant difference in self-efficacy perceptions of teachers based on gender. This may indicate that female teachers have more confidence in their abilities than their male counterparts. However, more detailed studies are needed to determine the reasons for this result. Like in this research, studies probing the nexus between educators' levels of organizational allegiance and institutional well-being did not discern a significant discrepancy predicated on gender (Demircan, 2019; Özgenel & Bozkurt, 2020). Similarly, several studies did not find a significant difference between the gender variable and happiness (Bulut, 2015; Gürbüz, 2020; İncekara, 2020).

Demographic variables such as professional seniority and class size were observed to affect school happiness. Teachers with younger seniority were found to have higher school happiness. Furthermore, teachers working in classes with fewer students were found to be happier. Certain scholarly works within the literature did not find a significant difference between seniority and school happiness (Bulut, 2015; Kuvvet, 2019; Bozkaya, 2023). The significant difference in terms of professional seniority suggests that teachers' views on happiness are affected by the work duration variable. Döş (2013)'s research similarly deduced that educators exhibit greater contentment with reduced class sizes, a finding congruent with the outcomes of the present research. Differences were observed in teachers' self-efficacy perceptions based on their field of study. However, more in-depth studies are needed to determine the exact reasons for these differences.

The relationships between teachers' school happiness, organizational commitment, and self-efficacy perceptions have been illuminated in various ways through the findings of this study. A significant relationship was determined between teachers' organizational commitment and school happiness. Additionally, the self-efficacy perception has a limited relationship with these variables. The demographic findings of the study indicate that variables such as professional seniority, class size, and field of study can affect teachers' perceptions and happiness. This study demonstrates that teachers' self-efficacy perceptions, school happiness, and organizational commitment levels are independent of certain demographic variables like education level and socio-economic status. This indicates that teachers are distributed homogeneously despite these variables.

Recommendations

A more detailed investigation is warranted into the underlying reasons for gender-based discrepancies in teachers' confidence in their abilities. Factors influencing teachers' well-being, especially demographic variables such as class size and tenure, should be scrutinized meticulously. Similarly, comprehensive studies are essential to understand the causes behind the variations in self-efficacy perceptions among teachers from different academic disciplines. Efforts should be made, with larger sample sizes, to ascertain whether teachers maintain similar attitudes and beliefs irrespective of their educational level or socio-economic status. Lastly, it is imperative to delve deeper into the relationships between teachers' happiness at school, their organizational commitment, and self-efficacy.

Compliance with Ethical Standard

In this study, all rules were complied with within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive". In addition, for this study, Kırşehir Ahi Evran University Social Sciences Research and Publication Ethics Committee numbered 2023/08/03 ethics committee approval was obtained.

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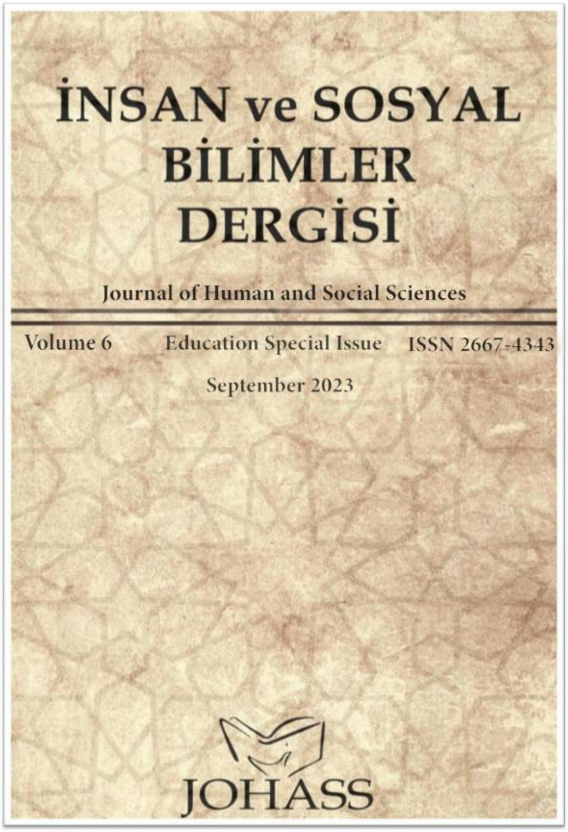

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Preschool Teachers' Sense of Humor and Children's Appreciation of Humor*

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Abstract

This study, which was conducted with 364 preschool children and 47 preschool teachers in order to determine the relationship between preschool teachers' sense of humor and children's appreciation of the value of humor in their classrooms, is a relational survey model. The data of the study were collected with "Personal Information Form", "Multidimensional Sense of Humor Scale- Updated Turkish Form" used to determine teachers' sense of humor, "Humor Observation Form" prepared by the researcher to determine children's appreciation of the value of humor, and "Humor Observation Form" and used with a 5-minute video with examples suitable for the stages in Paul McGhee's humor development theory. It was determined that preschool teachers' sense of humor was at a good level, and there was no significant difference between teachers' sense of humor and teachers' age, class size, and age of children in their classes. It was determined that the sense of humor of teachers with a seniority of 11-15 years was significantly higher than those with a seniority of 16 years and above. It was determined that children's appreciation of the value of humor was at a moderate level, and there was no significant difference between the gender of the children and both their appreciation of the value of humor and their level of finding the video funny. It was determined that there was a significant difference between the ages of the children and both their appreciation of the value of humor and their level of finding the video funny. 61-72 month old children's levels of appreciating the value of humor and finding the video funny were higher than 48-60 month old children. It was determined that there was no significant relationship between teachers' sense of humor and children's appreciation of humor.

Keywords: Humor, sense of humor, preschool, preschool teacher

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Introduction

Although there are opinions that it is impossible to make a definition of humor because it is a psychological phenomenon and that it is inappropriate to confine it within a definition, many definitions of humor have been made (Öğüt Eker, 2009). According to Booth-Butterfield & Booth-Butterfield (1991), humor is the deliberate use of verbal and nonverbal communication behaviors that elicit positive reactions such as laughter and joy. According to Cevizci (1997), it is the art of finding and revealing the distortions, incompatibilities, contradictions and ridiculousness in people or in some events that are considered natural. Humor includes the ability to produce humor, understand humor, appreciate the value of humor and use humor as a coping strategy (Thorson & Powell, 1993). Martin (2007) emphasized the difference between humor and sense of humor and stated that sense of humor is a more comprehensive concept that includes the concepts of humor production and humor understanding. Although a sense of humor is generally seen as a positive and desirable personality trait, it is not always clear what is meant by this concept. Sense of humor includes laughing at jokes and laughing situations, laughing easily and excessively, and making others laugh by producing humor (Eysenck, 1972). Sense of humor, an important personality trait, the ability to maintain a humorous perspective in the face of stress and to "see the funny side" of life's problems and challenges is an important coping skill that leads to greater resilience and emotional well-being. The ability to make others laugh and use humor to facilitate relationships and reduce interpersonal tension is a valuable social skill that contributes to social cohesion and support (Martin, 2019). There are three main theories of humor, namely superiority, dissonance and relaxation theories, which try to explain what it means for a situation to be humorous or what happens when something is perceived as humorous. The relaxation theory focuses on the physiological release of tension, the incongruity theory focuses on the contradictions between expectations and experiences, and the superiority theory focuses on the feeling of superiority over people (Shaw, 2010). According to the superiority theory, which is the oldest theory, laughter is caused by belittling another person or one's own past mistakes or stupidity (Martin, 1998). Morreall (1989), who states that the most common humor theory is the incongruity theory, states that according to this theory, humor is to enjoy something that conflicts with our mental patterns and expectations. According to the relaxation theory, which focuses on physiological motives, it is about relieving tension through laughter (Buijzen & Valkenburg, 2004; Meyer, 2000).

Raskin (1985) stated that some conditions are necessary for humor to occur:

The ideal condition for producing humor is when a person is joyful, when he or she is most inclined to laugh.

It is important to produce humor that is compatible with the person's humor taste and expectations.

Having something else occupying one's mind is an undesirable condition for humor.

If one's attention is focused on what the humor will come from, the fun is lost.

In an environment where another emotion arises, such as crying or surprise, humor can be inhibited.

McGhee (2002), who examined the development of humor in children according to Piaget's cognitive development theory, put forward his theory consisting of five stages:

Stage 0- Laughing without humor (first 6 months): In this stage, babies laugh without any humor.

Stage 1- Laughing at the attachment figure (6 months- 12/15 months): In this stage, babies laugh at the unfamiliar actions of their parents or the attachment figure.

Stage 2- Inconsistent behavior towards objects (12/15 months-3/4/5 years) The earliest examples of humor created by children are seen in this stage. After an object has become very familiar to the child, children like to use it in unusual and inappropriate ways.

Stage 3- Inconsistent naming of objects, events, people (2-3/4 years): In this stage, children begin to play by giving objects the wrong names.

Stage 4- Conceptual inconsistency (3-5 years): This stage is handled by dividing it into 4 categories:

a. Playing with the sounds of words (not their meanings): Children become attuned to the sounds of words and begin to play with the sounds of words on their own.
b. Combination of nonsense and real words: Children like to put words together in absurd ways, even if they know they are wrong.
c. Distorting the characteristics of objects, people or animals: Children like to add features to people, animals or objects that do not belong to them, erase existing features, and change the size, color or shape of familiar things. They laugh at inconsistent and impossible behavior of events, things and people with exaggerated characteristics.

d. Cross-gender naming: For children, it is quite amusing when other children are called by a name of the opposite sex or called by a name associated with the opposite sex.

Stage 5- Riddles and jokes (Multiple meanings) (6/7-10/11): Children can understand humorous jokes and riddles with words that have double meanings or ambiguity (McGhee, 2002).

Including humor in educational environments has many benefits for both teachers and children. When teachers have a sense of humor and children appreciate humor, it contributes positively to the classroom atmosphere and helps children learn more enjoyably. Humor can increase self-esteem and self-motivation, reduce classroom anxiety and facilitate learning (Berk, 1996; Evans-Palmer, 2010). Studies have shown that having a sense of humor is beneficial for both children and teachers. Studies have found that teachers' use of humor improves the classroom environment, increases student-teacher rapport and student motivation, and reduces tension (Aboudan, 2009; Kher et al. 1999; Provine, 2002). There are also studies that found that teachers' use of humor as a teaching, interaction and/or management tool can contribute to students' attention, motivation and learning (Berk, 2003; Gurtler, 2002). Humor can also help make the classroom a more comfortable and engaging learning environment for children and encourage their academic and behavioral achievement (Beard & Wilson 2013; Lovorn, 2009; Posnick-Goodwin, 2009). It has been found that developmentally appropriate, structured humor teaching and interaction strategies lead children to think at a higher level, increase their creativity and reach deeper knowledge about the subject (Henry, 2000; Paterson, 2006; Lovorn, 2008).

It has been stated that children with a sense of humor are more entrepreneurial, can think critically, have high problem-solving skills, have a positive outlook on life, can control their anger, and have less feelings of anger or hostility (McGhee & Frank 2014). Children with a high sense of humor can cope and adapt more easily and face events more easily even in difficult situations such as illness (Dowling 2014; Dowling et al., 2003). It is stated that thanks to the humor shared by children in the environment of friends, interactive interactions are born in which sincere relationships are established by having fun, anger is reduced, and boredom is prevented. Sentences with humor attract children's attention more, information is passed between children, and children move from the role of passive recipients to the role of active participants (McGhee & Frank 2014).

Teachers with a sense of humor are characterized by the nature of laughter and can make others laugh, have a positive attitude in facing difficult situations and maintain positive relationships with others (Na'imah et al., 2020). Research findings on teachers' reasons for using humor in the classroom indicate that they use humor to a) improve the atmosphere in the classroom and their relationships with students, b) deal with difficult situations and discipline problems, c) reduce tension and pressure to teach, d) attract their students' attention and interest, e) promote learning, and f) maintain their own interest and improve their mood during teaching (Darling & Civikly, 1987; Neuliep, 1991; Pollio & Humphreys, 1996; Rareshide, 1993; White, 2001).

Bergen (1992) concluded that kindergarten and first grade teachers tended to encourage a sense of humor in their students and tended to use a variety of strategies to increase the enjoyment of teaching and learning. Teachers who use humor generally exhibit a more lively and cheerful mood, often laugh at themselves, are not afraid to laugh at their own mistakes, and encourage their students to express humor. Research shows that children prefer teachers with humor and want their teachers to have a sense of humor (Garner, 2006; Nahas, 1998; Torok et al., 2004; Wanzer & Frymier, 1999).

When the literature was examined, it was seen that studies on humor styles were predominant in the studies conducted with teachers (Altınkurt & Yılmaz, 2011; Uyanık et al., 2015; Yılmaz, 2023), while studies on preschool teachers' use of humor and humor styles in the educational environment were limited. Although there are limited studies in which preschool children produce humor and appreciate the value of humor (Eskidemir Meral & Koçer, 2023; Hoicka, & Akhtar, 2011; Loizou, 2007; McGhee, 1971; Stenius et al., 2022), there is no study examining the relationship between preschool teachers' sense of humor and children's appreciation of the value of humor. Based on the view that it is important for children to be exposed to humor for their humor development (Eskidemir Meral & Koçer, 2023) and that teachers' having a sense of humor will contribute to the development of humor in children (Franzini, 2002), it was considered necessary to conduct this study. In this context, the study is expected to contribute to the literature.

The main purpose of this study is to determine the relationship between preschool teachers' sense of humor and children's appreciation of the value of humor. In line with this main purpose, answers to the following questions were sought:

What is the level of preschool teachers' sense of humor?

To what extent do children appreciate the value of humor?

Do preschool teachers' sense of humor vary according to their socio-demographic characteristics?

Does children's appreciation of the value of humor vary according to their socio-demographic characteristics?

Is there a significant relationship between preschool teachers' sense of humor and children's appreciation of humor in their classrooms?

Method

Model

This study is a correlational survey model. The relational screening model, one of the general screening model types, is a research model that aims to determine the existence and/or degree of change between two or more variables (Fraenkel & Wallen, 2009; Karasar, 2005). In this study, since the relationship between teachers' sense of humor and children's appreciation of the value of humor in their classrooms was to be determined, the relational screening model was preferred.

This research was carried out after the permission of Akdeniz University Social and Human Sciences Scientific Research and Publication Ethics Committee dated 03.04.2023 and numbered 182.

Sample and Population

The population of the study consists of preschool children attending kindergartens in Kepez, Muratpaşa and Konyaaltı districts of Antalya province and their teachers. The sample of the study consisted of 364 preschool children attending 5 kindergartens affiliated to the Ministry of National Education in Kepez, Muratpaşa and Konyaaltı districts of Antalya province and 47 female preschool teachers. Socio-demographic information of the teachers is shown in Table 1 and socio-demographic information of the children is shown in Table 2.

Compliance with Ethical Standard

In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed.

This research was carried out after the permission of Akdeniz University Social and Human Sciences Scientific Research and Publication Ethics Committee dated 03.04.2023 and numbered 182.

This study is supported by TUBITAK within the scope of 2209-A University Students Research Projects Support Program.

Table 1

Socio-Demographic Information of Teachers

Socio-demographic variables	N	%
Seniority		
11-15 years	21	44,7
16 years and above	26	55,3
Sex		
Female	47	100,0
Male	0	0,0
Teacher age		
30-40 years old	27	57,4
41 and above	20	42,6
Class size		
10-20 children	30	63,2
21-30 children	17	36,2
Class age		
48-60 months	24	51,1
61 months and over	23	48,9
Total	47	100,0

According to Table 1, 44.7% of the teachers have a seniority of 11-15 years and 55.3% have a seniority of 16 years or more. All of the teachers are female. The age of 57.4% of the teachers was between 30-40 years and 42.6% was 41 years and above. 63.2% of the teachers have 10-20 children in their class, 36.2% have 21-30 children in their class. The age of the children in the class of 51.1% of the teachers is 48-60 months and the age of the children in the class of 48.9% of the teachers is 61 months and above.

Table 2

Socio-Demographic Information of Children

Socio-demographic variables	N	%
Gender		
Girl	194	53,3
Male	170	46,7

Age		
48-60 months	112	30,8
61-72 months	252	69,2
Total	364	100,0

According to Table 2, 53.3% of the children were girls and 46.7% were boys. 30.8% of the children were 48-60 months old and 69.2% were 61-72 months old.

Data Collection Tools

The data of the study were collected with the "Personal Information Form" including questions to determine the socio-demographic information of children and teachers, the "Multidimensional Sense of Humor Scale - Updated Turkish Form" used to determine the teachers' sense of humor, and the "Humor Observation Form" prepared by the researcher to determine children's appreciation of the value of humor and used with a 5-minute video prepared by Eskidemir Meral & Koçer (2023), which includes examples appropriate to the stages in Paul McGhee's humor development theory.

Multidimensional Sense of Humor Scale-Updated Turkish Form

The Multidimensional Sense of Humor Scale is a 24-item self-report scale developed by Thorson and Powell (1993). The scale, which was first adapted into Turkish by Aslan et al. (1999), was adapted again by Özdoğru (2018). The Multidimensional Sense of Humor Scale-Updated Turkish Form used in this study was updated by Özdoğru (2018). Consisting of 4 dimensions and 24 items, the lowest total score that can be obtained from the scale is 0 and the highest is 96. The higher the total score, the higher the general sense of humor. The scale includes a general sense of humor score as well as four sub-dimensions. These are Generating Humor and Using it for Social Purposes; Using Humor as a Way of Coping; Attitude towards Humor Producers, and Evaluation of Humor. The Cronbach's Alpha coefficient for the scale including all items is 0.894, while the coefficients of the sub-dimensions vary between 0.487 and 0.887. For this study, the calculated Cronbach Alpha value of the scale for all items is 0.921. For the sub-dimensions, it ranges between 0.774 and 0.861.

Humor Observation Form

The Humor Observation Form is used together with a 5-minute video prepared by the researcher to determine the children's appreciation of the value of humor and containing examples appropriate to the stages in Paul McGhee's humor development theory prepared by

Eskidemir Meral & Koçer (2023). In the form, there are items with short descriptions of 26 scenes and sections for determining the children's laughter at these scenes and whether they find the video funny. While the children are watching the video, two researchers observe the children and record their laughing and not laughing at the scene on the form. The video is watched twice by the children. If the child laughs in any of the two viewings, 1 point is given to this item. If the child does not laugh in both viewings, that scene is scored as 0. The lowest score that can be obtained from the form is 0 and the highest score is 26. A high score on the form means that the child appreciates the value of humor. After the child watches the video, he/she is asked whether he/she finds the video funny or not, and a score of 1 is given if he/she finds it funny and 0 if he/she does not find it funny. Children were also asked which parts of the video they found funny. The Cronbach Alpha value calculated for all items in the Humor Observation Form in this study was 0.917.

Collection of Data and Analysis

The data were collected between 24 April 2023 and 18 May 2023. After ethics committee permission was obtained, school administrators and teachers in the sample were interviewed and informed about the study. Teachers who volunteered to participate in the study signed the Informative Consent Form. Then, the teachers completed the Personal Information Form and the Multidimensional Sense of Humor Scale- Updated Turkish Form. Informative Consent Forms were sent to the families of all children in the classes of the teachers who participated in the study. The study was explained to the children whose parents filled out the form and asked whether they wanted to participate in the study and their verbal consent was obtained. Children who volunteered were included in the study. Two children in the same class watched the video together in a separate quiet area. Meanwhile, the researchers observed the children, recorded their laughter on the "Humor Observation Form" and then asked them if they found the video funny.

Statistical Package for Social Science Version 26.0 (SPSS) program was used to evaluate the data. Before proceeding with the analysis, normal distribution condition was sought for the scale variables. The skewness and kurtosis values of the scale variables were found to be between -1 and +1 (Table 3) and it was determined that they met the normal distribution requirement (Hair et al., 2013). In the evaluation of the data; descriptive statistics, Cronbach Alpha coefficient in determining the reliability levels of the scales, Pearson correlation coefficient, Pearson Chi-Square, Continuity Correction and independent sample t test were preferred in comparing demographic variables and scale variables. Statistical significance level was taken as $p<0.05$.

Findings

The findings of the study are presented in three sections: the findings on teachers' sense of humor, children's appreciation of the value of humor, and the relationship between teachers' sense of humor and their appreciation of the value of humor.

The mean scores and descriptive statistics for the Multidimensional Sense of Humor Scale and Humor Observation Form are shown in Table 3.

Table 3

Mean Scores For Scale Variables

Variables	Min-Max	Mean	Min-Max	Total mean score	Skewness	Kurtosis	Cronbach Alpha
PDD (Instructor)	0-4	3,06±0,51	0-96	66,65±12,64	-,552	,274	0,921
MUSSK	0-4	2,71±0,62	0-44	29,61±7,23	,165	-,106	0,861
MBSC	0-4	2,66±0,71	0-24	13,10±3,47	-,547	,008	0,858
MUKT	0-4	3,48±0,55	0-20	17,29±2,98	-,896	-,015	0,774
MD	0-4	3,39±0,69	0-8	6,63±1,69	-,800	-,652	0,802
MDTE (C)	0-1	0,45±0,19	0-26	12,72±6,96	-,148	-,333	0,917

MCCS= Multidimensional Sense of Humor; MCCS= Generating Humor and Using it for Social Purposes; MCCS= Using Humor as a Way of Coping; MCCT= Attitude Towards Humor Producers MD= Evaluation of Humor; MDTE (Child) = Appreciation of Humor (Child)

In Table 3, the mean scores of the multidimensional sense of humor scale in teachers are 3.06±0.51 overall, 2.71±0.62 for producing humor and using it for social purposes, 2.66±0.71 for using humor as a way of coping, 3.48±0.55 for attitude towards people who produce humor, and 3.39±0.69 for evaluating humor. The mean score of Appreciating the Value of Humor in Children is 0.45±0.19.

Findings Regarding Teachers' Sense of Humor

The findings regarding the evaluation of teachers' sense of humor are shown in Table4.

Table 4

Evaluation of Teachers' Sense of Humor

Socio-demographic variables			Multidimensional Sense of Humor (MDHM)				
			MUSSK	MBSC	MUKT	MD	PDD (Instructor)
Seniority	**N**	**%**	x±*ss*	x±*ss*	x±*ss*	x±*ss*	x±*ss*
11-15 years	21	44,7	3,04±0,52	2,71±0,63	2,47±0,76	3,37±0,60	3,64±0,50
16 years and above	26	55,3	3,07±0,51	2,72±0,63	2,81±0,65	3,57±0,50	3,19±0,77
Test value			T:-0,169	T:-0,067	T:-1,642	T:-1,242	T:2,297
P value			P:0,866	P:0,947	P:0,108	P:0,221	P:0,026*
Class Size							
10-20 children	30	63,2	3,04±0,45	2,70±0,48	2,58±0,69	3,50±0,52	3,40±,68
21-30 children	17	36,2	3,09±0,62	2,74±0,84	2,79±0,75	3,45±0,61	3,38±0,74
Test value			T:-0,279	T:-0,198	T:-0,927	T:0,276	T:0,082
P value			P:0,782	P:0,844	P:0,359	P:0,784	P:0,935
Class age							
48-60 months	24	51,1	3,02±0,58	2,70±0,75	2,63±0,74	3,38±0,63	3,35±0,72
61 months and over	23	48,9	3,10±0,44	2,72±0,47	2,68±0,69	3,58±0,45	3,43±0,67
Test value			T:-0,574	T:-0,111	T:-0,240	T:-1,207	T:-0,392
P value			P:0,569	P:0,912	P:0,811	P:0,234	P:0,697
Teacher Age							
30-40 years old	27	57,4	2,98±0,54	2,59±0,63	2,52±0,72	3,38±0,61	3,44±0,72
41 and above	20	42,6	3,16±0,46	2,87±0,59	2,84±0,68	3,62±0,44	3,32±0,67
Test value			T:-1,200	T:-1,533	T:-1,563	T:-1,471	T:0,575
P value			P:0,236	P:0,132	P:0,125	P:0,148	P:0,568

*p<0.05; T: Independent sample t test was applied. MCCS= Multidimensional Sense of Humor (Teacher); MCCS= Generating Humor and Using it for Social Purposes; MCCS= Using Humor as a Way of Coping; MCCT= Attitude towards Humor Producers MD= Evaluation of Humor; MDTE (Child) = Appreciation of the Value of Humor (Child)

According to Table 4, it was determined that there was no significant difference between teachers' sense of humor and teachers' age, class size, and age of children in their classes (p>0.05). It was determined that there was a significant difference between teachers' sense of humor and teachers' seniority levels (p:0,026) and the sense of humor of teachers with a seniority level of 11-15 years was significantly higher than those with a seniority level of 16 years or more.

Findings on Children's Appreciation of the Value of Humor

The evaluation of children according to their appreciation of the value of humor is presented in Table 5.

Table 5

Children's Socio-Demographic Information and Their Appreciation of the Value of Humor

Socio-demographic variables				**Appreciating the Value of Humor**		
				x±*ss*	**Test value**	**P value**
Gender		]	**%**			
Girl			5	0,47±0,26	T:-1,288	P:0,198
	94	3,3				
Male			4	0,51±0,27		
	70	6,7				
Age						
48-60 months			3	0,38±0,26	T:-5,194	P:0,000*
	12	0,8				
61-72 months			6	0,53±0,25		
	52	9,2				
Funny situation						
Funny			8	0,52±0,25	T:5,198	P:0,000*
	15	6,5				
Not funny			1	0,31±0,27		
	9	3,5				

According to Table 5, there was no significant difference between children's appreciation of humor value and their gender (p:0,198). A significant difference was found between children's age groups and their appreciation of humor value (p:0,000). The appreciation of humor value was significantly higher in the age group of 61-72 months. It was determined that there was a significant difference between children's evaluation of humor as funny and appreciation of humor value (p:0,000) and appreciation of humor value was significantly higher in those who evaluated humor as funny.

The results of children's evaluation of the humor's funny status according to socio-demographic information are presented in Table 6.

Table 6

Evaluation of Children's Finding the Video Funny or Not Funny According to Demographic Variables

Socio-demographic variables			Finding it Funny		Test value
			Funny	Not funny	
Gender**	**Girl**	N	165	29	P:0,375
		%	85,1	14,9	
	Male	N	150	20	
		%	88,2	11,8	
Age***	**48-60 months**	N	87	25	P:0,002*
		%	77,7	22,3	
	61-72 months	N	228	24	
		%	86,5	13,5	

*p<0.05; ** Pearson Chi-Square; *** Continuity Correction tests were applied.

In Table 6, no significant difference was found between children's finding the video funny and their gender. However, 85.1% of girls and 88.2% of boys found the video funny. It was found that there was a significant difference between the age groups and finding the video funny (p:0.000), and 77.7% of children aged 48-60 months and 86.5% of children aged 61-72 months evaluated humor as funny. As the age of the children increases, their finding the video funny increases significantly.

Findings on the Relationship between Teachers' Sense of Humor and Appreciation of the Value of Humor

The correlation analysis between teachers' mean scores on the multidimensional sense of humor scale and children's appreciation of humor is shown in Table 7.

Table 7

Correlation Analysis Between Teachers' Multidimensional Sense of Humor Scale and Children's Appreciation of Humor

Variables	PDD (Instructor)	MUSSK	MBSC	MUKT	MD	MDTE (Q)
PDD (Instructor)	1	,802**	,853**	,773**	,731**	,062
		,000	,000	,000	,000	,681
MUSSK	,802**	1	,708**	,501**	,336*	,179
	,000		,000	,000	,021	,229
MBSC	,853**	,708**	1	,515**	,437**	,007

	,000	,000		,000	,002	,961
MUKT	,773**	,501**	,515**	1	,501**	-,081
	,000	,000	,000		,000	,590
MD	,731**	,336*	,437**	,501**	1	,078
	,000	,021	,002	,000		,603
MDTE (Q)	,062	,179	,007	-,081	,078	1
	,681	,229	,961	,590	,603	

*p<0.05; **p<0.01;MCCS= Multidimensional Sense of Humor; MCCS= Generating Humor and Using it for Social Purposes; MCCS= Using Humor as a Way of Coping; MCCT= Attitude towards Humor Producers MD= Evaluation of Humor; MDTE (Child) = Appreciation of Humor (Child)

Table 7 shows that there is no significant relationship between teachers' mean scores on the multidimensional sense of humor scale and their appreciation of children's humor (p>0.05).

Discussion and Results

This study, which was conducted with 364 children and 47 preschool teachers to determine the relationship between preschool teachers' sense of humor and children's appreciation of humor in their classrooms, is a relational survey model.

The average total score of the teachers on the multidimensional sense of humor scale is 66.65. Considering that the highest score that can be obtained from the scale is 96, it can be said that teachers' sense of humor is at a good level. When the teachers' sense of humor was examined in terms of sub-dimensions; the highest mean scores were in the dimensions of attitude towards people who produce humor and evaluation of humor, while the lowest mean scores were in the dimensions of using humor as a way of coping and producing humor and using it for social purposes. Since a fun learning approach is needed to develop children's cognitive, social-emotional and psychomotor aspects in early childhood, it is important for preschool teachers to use humor as part of the teaching and learning process (Na'imah et al., 2020). The higher the teachers' sense of humor, the more they will include humor in their classrooms and appreciate the humor of children who produce humor in their classrooms. For this reason, the fact that preschool teachers' sense of humor was at a good level in this study suggests that teachers also include humor in the classroom and appreciate the value of humor. Similar to this study, Gültekin & Ulutaş (2021) found that teachers found humor necessary in preschool education and needed knowledge and experience in planning and implementing activities that support humor. In the study conducted by Eskidemir Meral et al. (2019a) with preschool teachers and Çalışandemir & Tagay (2015) with pre-service preschool teachers, it was determined that the participants had high scores of participatory and self-improving humor styles, which are positive humor styles, and low scores of aggressive and self-destructive humor styles, which are negative humor styles. In the study conducted by Yılmaz & Erden (2022) with preschool teachers, it was found that teachers were aware of the contributions of humor to children. In another study conducted by Eskidemir Meral et al. (2019b), it was determined that the total scores of preschool teachers from the attitude scale towards the use of humor in education were high. In the study of Gültekin & Ulutaş (2021), it was determined that teachers found humor necessary in preschool education and in the study of Balta (2016), it was determined that teachers' attitudes towards humor were positive. In the study of Pourghaz et al. (2016) with primary school teachers, it was determined that teachers' sense of humor was at a medium level. Colker (2008) identified 12 characteristics that preschool teachers should have and stated that one of them is a sense of humor and that learning should be fun, children expect to be loved, respected and laughed at when they joke. Cartwright (1993) also emphasized that a well-rounded preschool teacher should have a sense of humor. Humor makes the learning process more enjoyable and interaction is strengthened when educators actively participate in their students' laughter (Steele, 1998). The high sense of humor of the teachers in this study can be interpreted as having one of the characteristics of an effective teacher.

It was determined that there was no significant difference between teachers' sense of humor and teachers' age, class size, and the age of children in their classes. It was determined that there was a significant difference between teachers' sense of humor and their seniority levels, and the sense of humor of teachers with a seniority of 11-15 years was significantly higher than those with a seniority of 16 years or more. It can be said that the fact that there is no significant difference between teachers' sense of humor and class size and the age of the children in their classes is due to the fact that humor is a personality trait and therefore teachers' sense of humor is not affected by the variables in their classes. When the studies in the literature were examined, it was seen that different results were obtained in the studies determining the relationship between teachers' socio-demographic characteristics and their humor styles, their understanding of humor and their use of humor in education. In the study conducted by Yılmaz & Altınkurt (2016), similar to the results of this study, it was found that teachers with less seniority had a more positive humor style. Chaniotakis (2010) revealed that older teachers use humor less in their teaching compared to their younger colleagues. Eskidemir Meral et al. (2019a) found that preschool teachers' humor styles did not differ significantly depending on their age and professional seniority. Similar to the results of this study, in the study conducted by Uyanık et al. (2015), it was determined that there was no significant difference between the mean humor style scores of pre-service preschool teachers and their ages. In the study conducted by Altınkurt &Yılmaz (2011) with primary school teachers and Yılmaz (2023) with preschool teachers, it was determined that humor styles did not differ according to seniority and age variables. In Balta's (2016) study, it was found that teachers' attitudes towards using humor in education did not vary according to gender and years of service.

Loizou and Recchia (2019) define humor as a produced or appreciated experience that causes a smile or laughter among its social indicators. In this study, the indicator of children's appreciation of humor was considered as children's smiling. In addition, children were asked whether they found the video funny. As a result of the study, the mean score of appreciation of humor in children was 0.45. According to this value, which can vary between 0-1, it can be said that children's appreciation of the value of humor is at a moderate level. In Yalçıntaş & Kartal's (2023) study, similar to the findings of this study, it was found that the average humor understanding scores of primary school students were at a medium level. Humor is a skill that can be developed, taught and learned (Lyon, 2006). The fact that children's appreciation of the value of humor is at a moderate level in this study shows that it is necessary to make various educational arrangements to develop preschool children's sense of humor. In a study conducted by Hoicka and Akhtar (2011) with 30-36-month-old children, it was found that children were sensitive to jokes, laughed when they were joked at, and children tended to continue this humor. Exposing children to more and more varied jokes and using humor more and more effectively in educational environments may be effective in developing children's sense of humor.

It was determined that there was no significant difference between the gender of the children and both their appreciation of humor value and their level of finding the video funny. Bergen (2020) stated that researchers examining the development of humor in infants, preschool children and primary school-age children generally determined that the early humor of both boys and girls is similar. The fact that humor differs according to gender in adulthood (Abel, 2002) but not at young ages has been attributed to environmental rather than biological reasons that gradually emerge with age.

It was determined that there was a significant difference between children's age groups and both their appreciation of the value of humor and their level of finding the video funny.

61-72-month-old children's levels of appreciating the value of humor and finding the video funny are higher than 48-60-month-old children. It can be said that as the age of children increases, their appreciation of the value of humor and finding the video funny increases significantly. This finding is an expected finding. McGhee (2002) stated that the humor examples that individuals understand and produce will have qualitative differences in the stages of cognitive development with age. The increase in children's appreciation of the value of humor as their age increases may be due to the progress in their cognitive development. According to Loızou (2005), children's appreciation of the situation in a humor element

In order for them to enjoy the humor, they need to be aware of what this situation is and how it is changing. Dissonance creates a "problem" in children's minds and when they can solve this problem, they can enjoy humor (Loızou, 2005). In this study, 61-72-month-old children may have found the video funnier and appreciated the value of humor more because they were more cognitively competent than 48-60-month-old children in solving the problem in humor scenes.

It was determined that there was a significant difference between children's evaluation of humor as funny and appreciation of humor value. It was determined that children who evaluated the video as funny had a significantly higher appreciation of humor value. However, contrary to the findings of this study, Addyman et al. (2018) conducted a study with 31-49 month-old children and found that cartoons rated as funnier by children did not cause more laughter and smiles. This was explained by the fact that young children did not fully understand what was asked of them. In Eskidemir Meral's (2023) study, it was found that there was a 30% discrepancy between 48-73 month-old children's laughter response to Nasreddin Hodja jokes and their finding them funny.

It was determined that there was no significant relationship between teachers' sense of humor and children's appreciation of humor. It is thought that this situation may be due to two reasons. Although the teachers in the study have a good sense of humor, they may not include humor in the classroom. For this reason, it may have been found that there was no relationship between children's appreciation of the value of humor and their teachers' sense of humor. The other reason may be that most of the children have been attending the preschool education class with the same teacher for one year. In this study, children were not asked how many years they had been in the same teacher's class. However, being with the teacher for one year may have ensured that they were not affected by the teacher's sense of humor. Franzini (2002) stated that the more teachers include humor in their classes and the more they support children's humor, the easier it will be for children's sense of humor to develop. Stenius et al. (2022) stated that it is important for educators to understand how adults can learn how children can learn to use humor, to understand children's own humor and to recognize its process-based nature. Using humor in the pedagogy and everyday life of early childhood education and care increases a sense of community and brings all members of the community closer together. Using humor in education is a skill and this skill can be learned (Stenius et al., 2022). Lovorn & Holaway (2015) found that although K-12 teachers believe that laughter in the classroom helps students learn more easily and retain information more effectively, most of them do not consciously include humor in the planning or implementation of their lessons. Teachers also reported that humor can be distracting and disruptive in the classroom. In studies with preschool teachers, most of the teachers reported that they encouraged the production of humor (Bergen, 1992; Taratori et al., 2007). In the study of Gültekin &Ulutaş (2021), it was found that although teachers found humor necessary in preschool education, they needed knowledge and experience in planning and implementing activities that support humor. In the study of Yurt and Keleş (2019), it was determined that preschool teachers were open to various improvements in exhibiting humor understanding characteristics.

As a result, 61-72 month old children's levels of appreciating the value of humor and finding the video funny were higher than 48-60 month old children. It was determined that there was no significant relationship between teachers' sense of humor and children's appreciation of humor.

Recommendations

Studies can be conducted to examine the relationship between preschool teachers' use of humor in the classroom and children's production of humor and appreciation of the value of humor.

Studies can be conducted to examine the relationship between classroom teachers' sense of humor and children's appreciation of the value of humor.

Similar studies can be conducted with children of different age groups.

Studies can be conducted to examine the relationship between parents' sense of humor and children's sense of humor.

Studies can be conducted to determine how and how often children and teachers produce humor in the classroom environment.

Similar studies can be conducted with male preschool teachers.

In order to support children's humor development, materials containing humor can be included in educational environments.

If preschool teachers include humor in the educational environment and support children to produce humor, it can contribute to children's appreciation of the value of humor.

Compliance with Ethical Standard

In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed.

This research was carried out after the permission of Akdeniz University Social and Human Sciences Scientific Research and Publication Ethics Committee dated 03.04.2023 and numbered 182.

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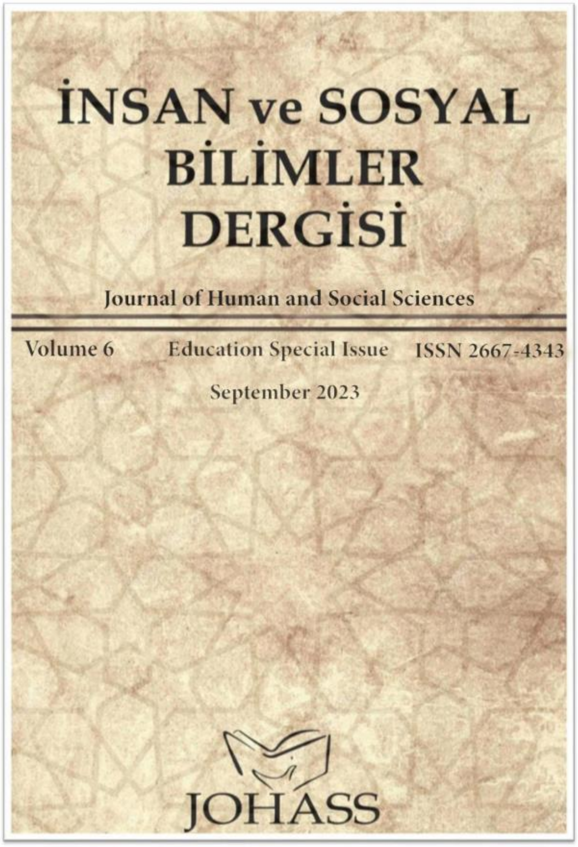

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Determination of Critical Thinking Dispositions and Communication Skills of Gifted Middle School Students

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Abstract

The purpose of the study is to determine the critical thinking dispositions and communication skills of gifted students, and to investigate whether these students' critical thinking dispositions and communication skills vary significantly by some demographic variables. This study used the descriptive survey model. The sample, which was determined by using maximum variation sampling, consists of 326 gifted students attending BİLSEMs. To collect data, the "California Critical Thinking Disposition Inventory", the "Communication Skills Evaluation Scale" with "Information Form" were used. In the analysis, descriptive statistics, t-test, ANOVA and correlation analysis techniques were employed. It was seen that the critical thinking level of the students is medium and communication skills level is high. Their critical thinking does not vary significantly by the variables of gender, birth order, grade level and family type. However, their level of critical thinking was determined to vary significantly by the variables of the number of siblings and mother's/father's education level. Their communication skills vary significantly by the variables of gender, grade level, mother's/father's education level and the number of siblings but does not vary significantly by the variables of birth order and family type.

Keywords: Critical thinking disposition, communication skill, middle school, BİLSEM

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Introduction

The desire for acceptance in their peer groups is an important issue for children's self-esteem. Communication is one of the ways that allow individuals to know and express themselves and understand others, enabling them to share their thoughts and ideas with others (Tutar, Erdönmez & Yılmaz, 2003). Communication is the transfer of all kinds of feelings, thoughts, information and meaning between people through signs such as symbols, gestures and mimics (Özkök, 1982). The social goal of communication is the sharing of certain common experiences by the people who make up the society, the transfer of cultural characteristics from one generation to the next and the teaching of social duties. The individual goal is to be able to express oneself and acquire new knowledge and abilities (Çağdaş, 2004).

According to Cüceloğlu (1993), for human beings, who consist of emotions, the exchange of emotions between each other occurs through communication. Individuals with strong language skills are considered to have an advantage in establishing effective communication. However, it is known that exceptionally gifted individuals, who can learn more accurately and faster in a shorter time than their typically developing peers in terms of speaking and language acquisition, may experience difficulties in using their communication skills (Koç, 2015; Helt et al., 2008). Gifted children may experience communication conflicts with their surroundings due to their inherent curiosity, which leads them to persistently pursue subjects that interest them. This leads them to ask questions that require detailed and profound answers (Davis & Rimm, 1998). Gifted children's attitudes towards different situations they encounter and factors such as their social environment also influence their social and emotional experiences as they interact with the outer world (Schmitz & Galbraith, 1991).

Therefore, in order to establish a qualified and contemporary education system that meets the needs of the era, there is a need for a common understanding, advanced consciousness and high-level working performance, all of which require effective communication (Yaman, 2019). One of the most challenging issues for gifted students is their inability to establish healthy communication with their peers. The self-concept and development in their talent area of gifted children are more advanced than their peers, which makes it challenging for them to fit in with their own age group and makes communication more difficult (Enç, 1973). Contrary to the common impression that gifted students are socially different and strange, less healthy and have limited interests, these individuals are more harmonious, physically healthy and can easily use higher-level thinking skills (Steiner & Carr, 2003). Ataman (2009) states that gifted students demonstrate characteristics such as engaging in detailed discussions, being highly curious, asking numerous questions, conducting research, making accurate observations, proposing innovative ideas, generating and developing unconventional projects, enjoying learning new information, being enthusiastic and excited when accessing data, being comfortable with complexity, and being able to critically think, in short, they exhibit the ability to think critically and use knowledge in different contexts.

There are some skills that are given great importance in education and shown among the 21st century skills. The most important of these skills are described as thinking skills and gathered under four headings as problem solving, decision making, critical and creative thinking skills by Costa (2001). Communication skills, which are among the skills of the 21st century, are learned behaviours that enable the individual to be in a satisfactory relationship with other people by using respect and empathy effectively, claiming their rights without belittling others and listening in an effective way and in this way, help the individual to easily be a part of the society (Yüksel-Şahin, 1998). Critical thinking is an affective progression that involves enabling multi-faceted criticism, applying objective and systematic approaches, making analyses in different situations (Akınoğlu, 2001). Through critical thinking, which includes inquiry, comprehensive thinking, independent thinking and restructuring, individuals can identify problems, find solutions, evaluate alternative solutions, examine the objectivity of decisions while considering all the details and act independently with free thinking (Ming-Lee Wen, 1999). Critical thinking is the process of evaluating and examining information using different criteria each time and arriving at an explanation and decision, instead of simply accepting the knowledge at face value as it is read or seen (Semerci, 2000). Gifted children are said to be individuals who internalize their thoughts by questioning them, systematically investigate the true information by seeking the causes of the problems they encounter, possess self-confidence, openness to change and have intellectual maturity (Ertaş, Kılıç & Şen, 2014). Critical thinking is considered as another dimension of thinking, where the individual engages in a comparable and reflective thinking process (Ennis, 1987). In today’s society, it is aimed to train individuals who have the ability to think critically, who can make decisions, who have strong communication skills, who can solve problems, who are sensitive to current problems and who can produce solutions, who can work collaboratively, and who can transfer the knowledge they have learned to others (Fer & Cırık, 2007). Baloğlu

(2004); In his study, which aimed to determine the situation of high and low achieving students in terms of critical thinking, he concluded that there was a difference in the critical thinking scale scores of high achieving students compared to low achieving students in favor of high achieving students.

One of the education institutions established in Turkey for gifted students to develop 21st century skills and enhance their talents and advanced thinking abilities outside formal education, while also providing opportunities for them to interact with peers who share similar interests, is Science and Art Centers (BİLSEMs). BİLSEMs are educational institutions that aim to help gifted students become aware of their inherent talents, support the development of these talents and foster their scientific creativity (Ministry of National Education [MNE], 2017). The biggest advantage of BİLSEMs for gifted children is that they do not isolate themselves from their friends. Students who come to BİLSEM, being aware of their own abilities, develop themselves in line with their abilities and have the opportunity to produce products, and grow up as individuals with high awareness and integrated with the society (Dönmez, 2004). Contrary to the common belief that gifted students are socially different and strange, less healthy and have limited interests, these individuals are more adaptable, physically healthy and able to use their higher-order thinking skills easily (Steiner & Carr, 2003). The development of communication skills as well as critical thinking skills will enable the student to become aware of wrong and biased behaviours (Kökdemir, 2000).

In the literature, there are limited studies on gifted students' communication skills and critical thinking dispositions. Linn and Shore (2008) showed that gifted students are more successful than their normally developing peers in behaviours that require critical thinking skills. Boran (2016) determined that critical thinking dispositions of graduate students are at a high level. A different study concluded that the use of critical thinking skills by gifted students increased significantly with the implementation of a differentiated curriculum (Atalay, 2014). Karakuş (2010) found that gifted students have advanced cognitive awareness and critical thinking skills. Kirmit et al. (2018) found that gifted middle school female students' critical thinking abilities are lower than those of gifted middle school male students. Iman (2017) revealed that discussion and debate significantly contribute to gifted children's success in critical thinking and speaking skills. Alfarah (2016) found statistically significant differences according to gender and student level in his study investigating the effect of gender and student level on the acquisition of communication skills of gifted students in Jordan. Milligan (2004), in her study in which she applied a program to develop the leadership qualities of specially talented individuals, concluded that verbal communication skills, which are one of the basic principles of leadership, increased significantly. In their study, McCollister and Sayler (2010) concluded that teachers offering critical thinking to gifted students according to their interests and learning styles increased the intellectual and academic development of gifted students. Dixon, Prater, Vine, Wark, Williams, Hanchon, and Shobe (2004) found in their study that when the Dixon and Hegel method, which encourages gifted students to think critically, is used continuously in classroom activities, gifted students who have the ability to make connections in all activities and work at high levels of thinking are able to achieve higher levels of thinking. They concluded that it improved the critical thinking skills that they were naturally good at.

Purpose of the Study

Critical thinking and communication skills are recognized by educators as vital skills required for being an expert of many school subjects (Yusuf & Adeoye, 2012). As a result of the review of the literature, it has been understood that the studies on the determination of the communication and critical thinking skills of gifted students and the variables that affect these skills are limited. In addition, it is thought that determining whether critical thinking dispositions are significantly correlated with communication skills in gifted students is important in terms of helping to update the curricula used in BİLSEMs. In this study, unlike other studies, we tried to include independent variables that are likely to have an impact and a few that are rarely encountered in the literature. One of these variables, the birth cycle, affects the originality of this product due to its impact on both critical thinking and the dissemination of communication. Sulloway (2001) states that birth order affects the strategies used in the competitive relationship between siblings and that the inequality created by the age difference has an impact on the entire personality. In this context, it can be said that this study aiming to determine the communication skills and critical thinking dispositions of gifted middle school students, is important because of its contributions to the literature. It is aimed to investigate the critical thinking dispositions and communication skills of BİLSEM students (middle school) in relation to the variables of gender, birth order, grade level, number of siblings, mother’s/father’s education level and family type. In this connection, the main problem statement of this study is “Is there a significant correlation between gifted students’ critical thinking dispositions and communication skills?”. Below are given the sub-problems;

1. What are gifted middle school students' level of critical thinking dispositions and communication skills?
2. Do critical thinking dispositions and communication skills of gifted students vary significantly by gender?
3. Do critical thinking dispositions and communication skills of gifted students vary significantly by birth order?
4. Do critical thinking dispositions and communication skills of gifted students vary significantly by grade level?
5. Do critical thinking dispositions and communication skills of gifted students vary significantly by mother's education level?
6. Do critical thinking dispositions and communication skills of gifted students vary significantly by the number of siblings?
7. Do critical thinking dispositions and communication skills of gifted students vary significantly by father's education level?
8. Do critical thinking dispositions and communication skills of gifted students vary significantly by family type?
9. Is there a significant correlation between the critical thinking dispositions and communication skills of gifted middle school students?

Method

The study was designed in line with the relational survey model, one of the descriptive survey models within quantitative research types. Relational survey is a survey approach used to reveal the existence of co-variance between more than one variable (Büyüköztürk et al., 2020). In essence, it is an attempt to investigate whether different variables change together (Creswell, 2012).

Sample and Population

The population of the study is comprised of gifted middle school students who are enrolled in BILSEMs (Science and Art Centers) located in six different provinces categorized into three different levels of socio-economic development according to the socio-economic development report by the Ministry of Industry and Trade in the 2022-2023 school year (Ministry of Industry and Trade, 2023). The participants were selected by using the maximum variation method. In this way a total of 326 students (162 females and 164 males) were selected from the population. The communication skills that gifted students living at different socioeconomic levels learn through experience and develop in response to the different situations they are exposed to will be different, and the intellectual experiential experiences they will encounter due to the differences in socioeconomic levels will also be different, affecting the development of individuals' thinking skills. BİLSEMs located there were selected. The primary purpose of using the maximum variation sampling method is to reveal similarities or differences, patterns among various situations relevant to the research purpose and to express the problem in a broader context (Büyüköztürk et al., 2020).

Table 1

Demographic Characteristics of The Participants

Variables	**Characteristic**	**N**	**%**
Gender	Female	162	49.7
	Male	164	50.3
Birth order	First child	33	10.1
	Second child	184	56.4
	Third child	190	33.4
Grade level	Fifth grade	127	39.0
	Sixth grade	105	32.2
	Seventh grade	94	28.8
Mother's education level	Primary school	7	2.1
	Middle school	8	2.5
	High school	79	24.2
	Bachelor's	163	50.0
	Master's	57	17.5
	Doctoral	12	3.7
Number of siblings	Single child	38	11.7
	One sibling	132	40.5
	Two siblings	97	29.8
	Three siblings	59	18.1
Father's education level	Primary school	2	0.6
	Middle school	2	0.6
	High school	36	11.0
	Bachelor's	207	63.5
	Master's	66	20.2
	Doctoral	13	4.0
Family type	Single-parent family	26	8.0
	Two-parent family	300	92.0

Table 1 shows that 49.7% of the participants are female and 50.3% are male and 10.1% of them are first child, 56.4% are second child and 33.4% are third child.

Data Collection Tools

A "Student Information Form", the "California Critical Thinking Disposition Inventory" and the "Communication Skills Evaluation Scale" were used to collect data.

To determine the demographic characteristics of the gifted students, the researchers prepared a student information form. By using the student information form, it was aimed to collect information about their demographic characteristics.

The second measurement tool used in the current study is the California Critical Thinking Disposition Inventory (CCTDI). It was developed by Facione, Facione and Giancarlo (1998) and was adapted to Turkish by Kökdemir (2003) and in the study of adapting the test to Turkish, for the original inventory, the Cronbach Alpha reliability coefficient was determined to be 0.88. The inventory is a 6-point Likert scale having 51 items. In the study of adapting the inventory to Turkish, the internal consistency (alpha) coefficient of the analyticity subscale of the inventory was .75, the internal consistency (alpha) coefficient of the open-mindedness subscale was .75, the internal consistency (alpha) coefficient of the curiosity subscale was .76, self-confidence subscale internal consistency (alpha) coefficient was .77, the internal consistency (alpha) coefficient of the truth-seeking subscale was .61 and the internal consistency (alpha) coefficient of the systematicity subscale was found to be .63. The sub-dimensions of CCTDI, the explanations of the sub-dimensions and the item numbers are shown in Table 2.

Table 2

Sub-Dimensions of CCTDI and The Item Numbers in The Sub-Dimensions

Truth-seeking: It is the ability of an individual to review alternatives or different ideas, search for truth, ask questions, and demonstrate objective behaviours even in situations contrary to their personal beliefs. This dimension consists of a total of 7 items (Items 6, 11, 20, 25, 27, 28, 49).
Open-mindedness: It refers to the individual's ability to show tolerance towards different situations and be sensitive to his/her own mistakes. In this context, the person takes into account the opinions of other people while reaching a judgment. This dimension consists of 12 items (Items 5, 7, 15, 18, 22, 33, 36, 41, 43, 45, 47, 50).
Inquisitiveness: It shows the enthusiasm of the individual to learn new thoughts and to acquire different perspectives without any personal interest. This dimension consists of a total of 9 items (Items 1, 8, 30, 31, 32, 34, 38, 42, 46).
Confidence in reasoning: It shows the confidence that the individual feels in the situations of presenting individual ideas. This dimension consists of a total of seven items (Items 14, 29, 35, 39, 44, 48, 51)

Analyticity: It refers to the state of being cautious in the event of a problem and using the objective traces and reasoning even in the face of difficult situations. This dimension consists of a total of ten items (Items 2, 3, 12, 13, 16, 17, 24, 26, 37, 40)
Systematicity: It is the state of systematically, programmatically and cautiously solving problems. This dimension consists of a total of six items (Items 4, 9, 10, 19, 11, 23)

The third data collection tool employed in the current study is the Communication Skills Evaluation Scale (CSES). It was developed by Korkut (1996) and adapted to Turkish by Köksal and Çöğmen. CSES is a five-point Likert scale consisted of a single dimension and 23 items. There is no reverse coded item in the scale. In the original scale, the Cronbach Alpha coefficient was determined to be .88, indicating that the scale has enough reliability. In this study, the Cronbach Alpha reliability coefficient is .86.

Collection of Data and Analysis

The data were first transferred to digital environment and analyzed in the SPSS.20 Statistics program package. The critical thinking dispositions and communication skills of the gifted middle school students were determined by using descriptive statistical methods. A normality test was carried out in order to reveal whether the data distributed normally. Skewness and Kurtosis values were used for the normality analysis of the groups. The skewness values of CCTDI were found to be between 0.21 and 0.14 and the kurtosis values of the inventory were found to be between 1.26 and -0.27 while the skewness values of the Communication Skills Evaluation Scale were found to be between 0.38 and 0.14 and the kurtosis values of the scale were found to be between 0.08 and 1.27. When the skewness and kurtosis values fall within the range of -1.5 - +1.5, the data are considered to exhibit a normal distribution (Tabachnick & Fidel, 2013).

In CCTDI, the positive items are scored as follows: “1=Strongly Disagree”, “2=Disagree”, “3=Partially Disagree”, “4=Partially Agree”, “5=Agree” and “&=Strongly Agree”. On the other hand, for negative items, the scoring is reversed during calculations. The scale was considered as a whole, and it can be stated that students with scores smaller than 240 demonstrate a low level of critical thinking disposition, while students with scores exceeding 300 demonstrate a high level of critical thinking disposition. Whether the students’ critical thinking dispositions varied significantly by gender and family type were examined using an independent groups t-test analysis, while significant differences based on grade level, parental education level, number of siblings and birth order were determined using ANOVA test.

In CSES used to measure the communication skills of the gifted middle school students, the items are scored as follows: “1=Never”, “2=Rarely”, “3=Sometimes”, “4=Often” and “5=Always”. The total score to be taken from the scale ranges from 25 to 125 and students scoring between 25 and 58 can be considered to have low-level communication skills, those scoring between 59 and 91 can be categorized as having medium-level communication skills, while students scoring between 92 and 125 can be considered to have high-level communication skills. The homogeneity of the groups was determined using the Levene test, and the significance of the differences in students’ communication skills based on gender and family type was analyzed using an independent samples t-test while the potential significant differences based on grade level, parental education level, number of siblings and birth order were examined using the One-Way ANOVA test.

Pearson Correlation analysis was run to uncover the correlation between the critical thinking dispositions and communication skills of the gifted students.

Compliance with Ethical Standard

Ethical permissions were taken with the final decision of Tokat Gaziosmanpaşa University Social and Human Sciences Research Ethics Committee’s meeting dated 16/05/2023, the session number is 08, the decision number is 01-54 and the decision is 08.32.

Findings

The findings obtained as a result of the analyses run for the sub-problems are given in tables according to the order of the sub-problems.

The first sub-problem of the study is about the determination the level of the critical thinking dispositions and communication skills of the gifted students. The results of the descriptive analysis carried out to this end are shown in Table 3.

Table 3

The Means and Standard Deviations of The Gifted Students' Critical Thinking Dispositions and Communication Skills

	LOW		MEDIUM		HIGH		X̄	S
	N	%	N	%	N	%		
Critical Thinking Dispositions	0	0	312	95.7	14	4.3	2.04	.20
Communication Skills	2	.6	141	43.3	183	56.1	86.53	13.09

When examined in terms of critical thinking, the arithmetic mean of the gifted middle school students is 2.04, with a standard deviation of 0.20. Furthermore, the gifted students were found to have a critical thinking disposition at a rate of 0% in the low level, 95.7% in the medium level, and 4.3% in the high level. In other words, the gifted middle school students were found to have a medium level of critical thinking disposition across the scale. When examined in terms of communication skills, the gifted middle school students have an arithmetic mean of 86.53 with a standard deviation of 13.09. Furthermore, the gifted students were found to have communication skills at a rate of 0.6% in the low level, 43.3% in the medium level and 56.1% in the high level. In other words, the gifted middle school students generally possess communication skills at a high level.

The results of the t-test analysis run to find an answer to the sub-problem "Do critical thinking dispositions and communication skills of gifted students vary significantly by gender?" are presented in Table 4.

Table 4

Results of The T-Test Analysis Run to Analyse Whether The Gifted Students' Critical Thinking Dispositions and Communication Skills Vary Significantly by Gender

	Gender	N	X̄	S	t	p
Critical Thinking Dispositions	Female	162	191.71	19.31	1.05	.29
	Male	164	189.33	21.40		
Communication Skills	Female	162	88.36	13.32	2.53	**.01**
	Male	164	84.71	12.62		

As shown in Table 4, the gifted students' critical thinking dispositions do not vary significantly by gender [t(324) = 1.05, p>0.05]. The mean critical thinking disposition score of the female students ($\bar{X}$: 191.71) is higher than that of the male students ($\bar{X}$: 189.33). As seen in Table 4, the communication skills of the gifted middle school students vary significantly by on gender [t(324) = 2.53 p< .05]. The mean communication skill score of the female students ($\bar{X}$:88.36) is higher than that of the male students ($\bar{X}$: 84.71).

The third sub-problem is "Do gifted students' critical thinking dispositions and communication skills vary significantly by birth order?". Before proceeding to the analysis stage, the homogeneity of variances was tested using the Levene test (sig > .05). As a homogenous distribution was found, ANOVA was conducted. The results of the ANOVA run to investigate whether the differences are statistically significant or not are shown in Table 5.

Table 5

Results of The ANOVA Test Run to Determine Whether The Critical Thinking Dispositions and Communication Skills of The Gifted Students Vary Significantly by Birth Order

Scales	Whole Scale	Sum of squares	Sd	Mean square	F	p
Critical Thinking Dispositions	Between-Groups	219.363	2	109.682	.26	.76
	Within-Groups	135030.026	323	418.050		
	Total	135246.390	325			
Communication Skills	Between-Groups	638.22	2	319.11	1.87	.15
	Within-Groups	550013.02	323	170.31		
	Total	55651.25	325			

Table 5 shows that the critical thinking dispositions of the gifted students do not vary significantly by birth order [$F_{(2\ -323)=}$ 0.26 p>.05]. In other words, birth order does not significantly affect critical thinking dispositions. As seen in Table 5, the communication skills of the gifted students do not vary significantly by birth order [$F_{(2-323)=}$ 1.87, p>.05]. In other words, birth order does not significantly affect communication skills.

The fourth sub-problem is "Do gifted students' critical thinking dispositions and communication skills vary significantly depending on grade level?". Before proceeding to the analysis stage, the homogeneity of variances was tested using the Levene test (sig > .05), and it was determined that there was a homogenous distribution and ANOVA was conducted. The results of the ANOVA are presented in Table 6.

Table 6

Results of The ANOVA Test Run to Investigate Whether The Critical Thinking Dispositions and Communication Skills of The Gifted Students Vary Significantly by Grade Level

	Whole Scale	Sum of squares	Sd	Mean square	F	p
Critical Thinking Dispositions	Between-Groups	1096.339	2	548.16	1.32	.26
	Within-Groups	134153.05	323	415.33		
	Total	135249.39	325			
Communication Skills	Between-Groups	3620.54	2	1810.271	11.24	.00
	Within-Groups	52030.77	323	161.08		
	Total	55651.25	325			

Table 6 shows that the critical thinking dispositions of the gifted students do not vary significantly by grade level [$F_{(2–323)=}$ 1.32, p>.05]. Grade level does not affect significantly critical thinking dispositions. Similarly, grade level does not significantly affect the communication skills of the gifted students [F($_{2\text{-}323)=}$ 11.24 p<.05].

The fifth sub-problem is “Do gifted students’ critical thinking dispositions and communication skills vary significantly by mother’s education level?”. Before proceeding to the analysis stage, the homogeneity of variances was tested using the Levene test (sig > .05), and it was determined that there was a homogenous distribution and ANOVA was conducted. The results of ANOVA run to investigate whether the differences in arithmetic means are statistically significant or not are shown in Table 7.

Table 7

Results of The ANOVA Test Run to Investigate Whether The Critical Thinking Dispositions and Communication Skills of The Gifted Students Vary Significantly by Mother’s Education Level

	Whole Scale	Sum of squares	Sd	Mean square	F	p
Critical Thinking Dispositions	Between-Groups	7691.48	5	1538.29	3.85	.002
	Within-Groups	127557.90	320	398.61		
	Total	135249.39	325			

Communication Skills	Between-Groups	2882.07	5	576.41	3.49	.00
	Within-Groups	52769.175	320	164.904		
	Total	55651.252	325			

Based on the data presented in Table 7, it is evident that the critical thinking dispositions of gifted students show notable variations depending on the educational level of their mothers [$F_{(5\text{-}320)=}$ 3.85, p<.05]. To investigate the origin of this difference, researchers conducted the Scheffe test, revealing a statistically significant distinction in favour of the students whose mothers hold a master's degree over those whose mothers possess a bachelor's degree. Similarly, the communication skills of the gifted students were also found to vary significantly by mother's education level [$F_{(5\text{-}320)=}$ 3.49, p<.05]. To identify the cause of this distinction, researchers employed the Scheffe test, which demonstrated a statistically significant difference in favour of the students whose mothers have a doctoral degree compared to those whose mothers have completed middle school.

The sixth sub-problem is "Do critical thinking dispositions and communication skills of gifted students vary significantly by the number of siblings?". The homogeneity of group variances was tested using the Levene test, and according to the test results, it was determined that the group variances exhibited homogenous distribution. Then ANOVA was conducted and the results are presented in Table 8.

Table 8

Results of the ANOVA Test Run to Investigate Whether The Critical Thinking Dispositions and Communication Skills of The Gifted Students Vary Significantly by The Number of Siblings

	Whole Scale	**Sum of squares**	**Sd**	**Mean square**	**F**	**p**
Critical Thinking Dispositions	Between-Groups	7501.65	3	2500.55	6.30	.00
	Within-Groups	127747.73	322	396.73		
	Total	135249.39	325			
Communication Skills	Between-Groups	2087.91	3	695.96	4.18	.00
	Within-Groups	53563.34	323	166.34		
	Total	55651.252	325			

Table 8 shows that the critical thinking dispositions [$F_{(3-322)=}$ 6.30, p<.05] and communication skills [$F_{(3-323)=}$ 4.18, p<.05] of the gifted students vary significantly depending on the number of siblings. In other words, the number of siblings significantly affects the critical thinking dispositions and communication skills of the gifted students. The Scheffe test was conducted to find the source of this difference, and a significant difference was found between the gifted students who are the single child in the family and the gifted students who have 2 or more siblings in favour of the students having 2 or more siblings. In the communication skills, a significant difference was found between the gifted children having 2 siblings and the gifted children having 3 siblings in favour the gifted children having 2 siblings.

The seventh sub-problem is “Do gifted students’ critical thinking dispositions and communication skills vary significantly by father’s education level?”. The homogeneity of group variances was tested using the Levene test, and according to the test results, it was determined that the group variances exhibited homogenous distribution. Then ANOVA was conducted, and the results are presented in Table 9.

Table 9

Results of The ANOVA Test Run to Investigate Whether The Critical Thinking Dispositions And Communication Skills of The Gifted Students Vary Significantly by Father’s Education Level

	Whole Scale	**Sum of squares**	**Sd**	**Mean square**	**F**	**p**
Critical Thinking Dispositions	Between-Groups	7138.45	5	1427.69	3.56	.00
	Within-Groups	128110.935	320	400.34		
	Total	135249.39	325			
Communication Skills	Between-Groups	5935.07	5	1187.01	7.64	.00
	Within-Groups	49716.14	320	155.36		
	Total	55651.25	325			

The data from Table 9 indicate that there are significant differences in the critical thinking dispositions and communication skills of the gifted students on the basis of the education level of their fathers [$F_{(5-320)}$ 3.56, p<.05]; [$F_{(5-320)=}$ 7.64, p<.05]. The Scheffe test was conducted to find the source of this difference, and the critical thinking dispositions of the students whose fathers have undergraduate education level were found to be significantly higher than those whose fathers' education level is graduate. In the communications skills, a significant difference was found between the gifted students whose fathers hold a doctoral degree or a bachelor's degree and the gifted students whose fathers are high school graduates in favour of the students whose fathers hold a doctoral or bachelor's degree.

The eighth sub-problem is "Do critical thinking dispositions and communication skills of gifted students vary significantly depending on family type?". The results of the t-test conducted are shown in Table 10.

Table 10

The Arithmetic Means and Standard Deviations of The Gifted Students' Critical Thinking Dispositions and Communication Skills in Relation to Family Type

	Family Type	**N**	**$\bar{X}$**	**S**	**t**	**p**
Critical Thinking Dispositions	Two-parent family	300	190.23	19.297	-.59	.56
	Single-parent family	26	193.85	30.724		
Communication Skills	Two-parent family	300	86.60	13.21	.41	.68
	Single-parent family	26	85.61	11.65		

As seen in Table 10, the critical thinking dispositions of the gifted students do not vary significantly by family type [t(324) = -.59 p>.05]. The mean critical thinking score of the gifted students having a single-parent family ($\bar{X}$: 193.85) is higher than that of the students having a two-parent family ($\bar{X}$:190.23). As seen in Table 10, the communication skills of the gifted students do not vary significantly by family type [t(324) =0.41, p> .05]. Moreover, the mean communication skill score of the gifted students having a two-parent family ($\bar{X}$: 86.60) is higher than that of the students having a single-parent family ($\bar{X}$: 85.61). This may indicate that family type does not a significant effect on the communication skills of the gifted students.

The ninth sub-problem is "Is there a significant correlation between the critical thinking dispositions and communication skills of gifted middle school students?". To find an answer to this question, a Pearson Correlation analysis was performed on the data set, which showed a normal distribution. The results of the analysis are given in Table 11.

Table 11

Results of The Pearson Correlation Analysis Conducted to Determine Whether There is A Significant Correlation Between The Critical Thinking Dispositions and Communication Skills of The Gifted Students

Scales	N	X̄	S	r	p
Critical Thinking Disposition Scale	326	190.52	20.40	.40	.00
Communication Skills Evaluation Scale	326	86.53	13.09		

Table 11 shows that there is a positive, weak and significant correlation between critical thinking dispositions and communication skills of the gifted students (r= .40; p< .01).

Discussion and Results

The critical thinking dispositions and communication skills of the gifted middle school fifth, sixth and seventh grade students were investigated in relation to some demographic characteristics.

It was found that the students' critical thinking dispositions are at a medium level. Socioeconomic level and environmental factors are among the factors that affect the critical thinking skills of gifted students at a medium level. In the relevant literature, results similar to that of the current study have been reported. Görücü (2014) found that the critical thinking level of gifted middle school students is medium. However, Demir (2006), Karabacak (2011), Yıldız (2011) and Usta (2019) found that gifted middle school students have a high level of critical thinking. Akar and Kara (2020) concluded that primary school fourth grade students have good critical thinking attitudes.

In the current study, it was observed that the variable of gender had no statistically significant effect on the critical thinking dispositions of the gifted students. In the relevant literature, some studies indicate that there is no gender-based difference in the critical thinking skills of gifted middle school students (Narin and Ayberk 2010; Açıkgöz and Ayrancı, 2011; Vierra 2014). In some studies, however it has been reported that female gifted middle school students have better critical thinking dispositions than their male counterparts (Akıllı, 2012; Çağlayan Öztürk, 2013; Altan, 2020). Demirkaya and Çakar (2012) stated that when evaluated in terms of critical thinking abilities, female students were found to be more skilled than male students, indicating a significant difference based on gender. Similarly, Rudd, Baker, et al. (2000) reported a significant difference in favour of girls.

In the current study, the variable of birth order was found to have no significant effect on the critical thinking dispositions of the gifted students. Aşkar (2015) also stated that birth order is not a variable influential on critical thinking. Karanfil (2014) conducted a study examining sports high school and physical education students and concluded that birth order did not lead to a significant difference in the level of critical thinking.

In the current study, it was discovered that the variable of grade level had no statistically significant effect on the critical thinking dispositions of the gifted students. Some studies in the literature have also reported that grade level does not create a significant difference (Ay and Akgöl, 2008; Kahraman, 2008). There are some other studies reporting different results. Bayındır (2015) found that among gifted middle school students, students at the 6th-grade level have a higher level of critical thinking disposition compared to students at the 7th-grade level. In another study, İncirkuş (2021) found that there is an increase in critical thinking with increasing grade level. Dayı (2011) revealed a significant correlation between critical thinking and grade level.

In the current study, the variable of mother's education level was found to have a significant effect on the critical thinking dispositions of the gifted students. The reason for the significant effect of mother's education level on the critical thinking dispositions is believed to be that as mothers' education level increases, they approach their children with a more critical perspective in their relationship and communication. Görücü (2014), Özgün (2019), and Usta (2019) stated in their studies that mother's education level causes a significant differentiation in critical thinking. According to Ural and Sağlam (2011), mother's education level also creates a significant difference. In other studies, in the literature, it has been determined mother's education level is not a significant variable influential on the critical thinking dispositions of gifted middle school students (Akıllı, 2012; Ocak and Kutlu-Kalender, 2016; Ekinci, 2009; Kuzu, 2015; Yıldırım and Şensoy, 2017; Yüksekbilgili, 2019).

Furthermore, the current study uncovered a significant variation in the critical thinking dispositions of gifted middle school students based on the number of siblings they have. Similarly, Döner (2020) reached the conclusion that student groups who are the only child and the groups who have one sibling have a higher critical thinking disposition compared to the student groups having more than one sibling. There are some other studies in the literature in which it has been reported that the number of siblings is not a significant factor in terms of critical thinking dispositions (Öztürk, 2006; Usta 2019; Özgün, 2019; Yüksekbilgili, 2019). In another study, Mete (2021) reached the conclusion that critical thinking skills are not significantly correlated with the number of siblings. Aşkar (2015) determined that the number of siblings is not a significant factor influential on critical thinking skills in these student groups. Kahraman (2008); on the other hand, stated that as the number of siblings increases, the critical thinking skills level of gifted middle school students decreases.

In the current study, it was established that the educational level of the fathers had a statistically significant effect on the critical thinking dispositions of the gifted students. The reason for finding a significant correlation between father's educational level and critical thinking disposition is believed to be that fathers with higher levels of education tend to approach and communicate with their children with a more critical perspective. Similarly, Oflas (2009) stated that father's educational level creates significant differences in critical thinking skills. In another study, Bal (2011) identified a significant correlation between father's educational level and critical thinking skills. In another study, Özgün (2019) found a significant effect father's educational level on critical thinking skills of gifted middle school students. Contrary to this study's findings, it has been determined that father's education level is not a significant factor influential on the critical thinking skills of gifted students (Yüksekbilgili, 2019; Görücü, 2014; Ekinci, 2009; Kuzu, 2015; Yıldırım and Şensoy, 2017).

The current study revealed that the variable of family type had no statistically significant effect on the critical thinking dispositions of the gifted middle school students. In the relevant literature, there is no research specifically investigating the effect of family type on the critical thinking skills of gifted middle school students. However, there are some studies that have explored the influence of extended family and nuclear family structures on the critical thinking skills of these students. According to Mete (2021), living in a nuclear family or an extended family has no significant impact on the level of critical thinking skills of gifted students.

In the current study, it was revealed that the gifted middle school students have communication skills at a high level. It is believed that individuals having a high level of communication skills will positively affect their achievement and enable them to adopt a more constructive approach to encountered problems. In their study examining primary school students in relation to different variables, Karatekin et al. (2012) found that the students had a high level of communication skills. Similarly, Köksal and Çöğmen (2018), Özdemir (2006), Schutte (2001) and Tepeköylü et al. (2009) also found that communication skills of gifted students were at a high level.

In the current study, it was observed that the communication skills of the gifted middle school students varied significantly depending on gender. The female students' communications skills were found to be better that those of the male students. This result is believed to be due to differences in the developmental processes between female and male students. Karatekin et al. (2012) and Dalkılıç (2011) found in their studies, where they examined communication skills based on different variables, that gender had an impact on students' communication skills. Kashefian-Naeeini and Sheikhnezami-Naeeini (2020) found in their study on middle school students in Iran that gender created a significant difference in communication skills. Hariyanto, Yamtinah, Sukarmin, Saputro, and Mahardiani (2019) found in their study on students studying in South Tangerang that communication skills varied significantly depending on gender. Büyük (2020) stated that gender created a significant difference in communication skills and found that males had a higher level of communication skills.

In the present study, it was found out that the variable of birth order had no statistically significant effect on the communication skills of the gifted middle school students. Yetişkin (2016) found that being the first child, middle child or last child did not create a significant difference in communication skills among adolescents. However, Baran and Uzak (2021) found in their study, where they examined communication skills of primary school students based on different variables, that birth order had an impact on students' communication skills.

In the present study, the communication skills of the gifted middle school students were found to vary significantly depending on grade level. It is thought that the age factor has an effect on this difference. Köksal and Çöğmen (2018) found in their study on the level of communication skills that the difference between students in the 5th grade and students in the 6th and 7th grades was significant. Akçam (2019) and Yıldırım (2015) found that communication skills varied significantly depending on grade level and that 7th-grade students had significantly higher communication skills compared to students in the 5th and 6th grades. However, Kara et al. (2020) and Kartal (2013) revealed that grade level is not a significant factor affecting communication skills.

In the current study, it was found that the communication skills of the gifted students exhibited significant variations depending on the educational level of their mothers. In addition, it was revealed in this study that the communication skills of the gifted students whose mothers are middle school graduates and those of the gifted students whose mothers have a doctoral degree are better than those of the other students. Karatekin et al. (2012) revealed a significant difference in favour of the students having mothers who had a bachelor's degree in terms of communication skills. Karakuş (2010) observed that among gifted students, there was a significant difference in favour of the students with mothers who had a bachelor's degree in terms of communication skills. Contrary to these findings, various studies in the literature have concluded that mother's educational level does not influence communication skills (Korkut 1996; Dalkılıç 2006; Gölünü and Karcı 2010). Yetişkin (2016), Bingöl, and Demir (2011) also stated that mother's educational level did not create a significant difference in communication skills. Savaş (2018) reached the conclusion that mother's educational level did not create a statistically significant difference in the communication skills.

In this study, it was observed that the communication skills of gifted middle school students varied significantly depending on the number of siblings they have. In the study conducted by Baran and Uzak (2021) on communication skills, a significant difference was reported in favour of the individuals who have two or more siblings. In another study, Kerr (1991) stated that having two siblings supported communication skills, while having more than two siblings increased the level of conflict. On the other hand, Yetişkin (2016), Kartal (2013), Bingöl, and Demir (2011) reached the conclusion that the number of siblings did not have an impact on communication skills.

In this study, it was discovered that the communication skills of gifted middle school students exhibited significant variations depending on the educational level of their fathers. Karatekin et al. (2012) found that academically gifted students whose fathers had educational levels of high school and university had stronger communication skills. However, in some studies, it has been found that students whose fathers' education levels are lower have better communication skills (Aktuğ, 2010; Bingöl and Demir, 2011; Yıldırım, 2015). Furthermore, there are studies in the literature that show no impact of father's educational level on communication skills (Savaş, 2018; Toy, 2007; Talibzade, 2015).

In the current study, the communication skills of the gifted middle school students were found to not vary significantly depending on family type. Similarly, Yetişkin (2016) found that the marital status of parents did not create a statistically significant difference in communication skills among adolescents. Akçam and Türkyılmaz (2019) found in their study on communication skills of middle school students that the family variable defined as extended family and nuclear family did not have an impact on students' communication skills. Kartal (2013) examined communication skills in terms of the togetherness of parents and found that whether the parents were together or not did not create a significant difference in communication skills.

In the current study, the correlation between the critical thinking dispositions and communication skills of the gifted middle school students was examined and a positive, weak and significant correlation was found. It could be found that there are some studies parallel to this study in the literature. Köksal and Çöğmen (2018) stated that there is a significant and positive relationship between the communication skills and all sub-dimensions of critical thinking skills of 6th, 7th and 8th grade students studying at the secondary school level.

Recommendations

On the basis of the results, the following can be suggested;

- There is a need for the study to be conducted in other regions of Turkey and tested on different sample groups to obtain more comprehensive results.
- The study was conducted on gifted students in grades 5, 6, and 7. The communication skills and critical thinking dispositions of gifted students from different levels of education can also be evaluated.
- In this study, the communication skills and critical thinking dispositions of gifted students were examined. In addition, the outcomes of different variables (science literacy, scientific process competency, creative thinking skills) can also be investigated.
- To comprehensively evaluate which variables and in what direction influence the critical thinking dispositions of gifted middle school students, other measurement tools can be used and different applications can be conducted.
- For the positive development of critical thinking dispositions and communication skills of gifted middle school students, school lessons should incorporate activities and techniques that focus on critical thinking dispositions and communication skills. By doing so, students can foster their mastery of critical thinking and communication skills for their future experiences.

- Further research can be conducted on the relationship between the number of siblings and critical thinking. Depending on the study group, the number of siblings may be related to the level of critical thinking. It is important to conduct more research to better understand the reasons behind this relationship.

Compliance with Ethical Standard

Ethical permissions were taken with the final decision of Tokat Gaziosmanpaşa University Social and Human Sciences Research Ethics Committee's meeting dated 16/05/2023, the session number is 08, the decision number is 01-54 and the decision is 08.32

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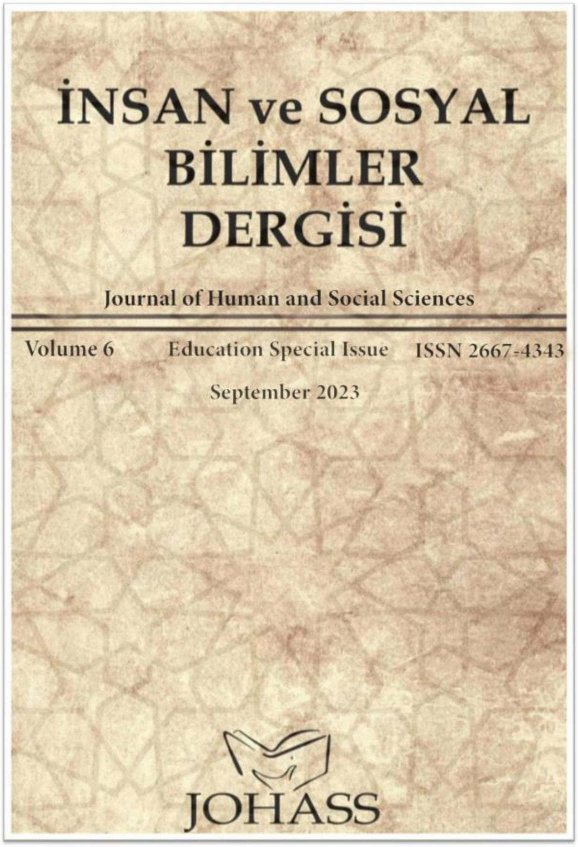

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Comparative Analysis of Gamification and Storytelling Strategies in EFL Vocabulary Acquisition

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Comparative Analysis of Gamification and Storytelling Strategies in EFL Vocabulary Acquisition

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Abstract

In both first and second-language education, vocabulary acquisition serves as a crucial skill. This quasi-experimental research study was carried out to assess the impact of storytelling and gamification strategies on the lexical abilities and working memory development of EFL young learners. The research cohort comprised 40 Turkish students aged 9 to 10 and the study was conducted within the confines of an elementary school affiliated with a foundation in Türkiye. An independent sample t-test was employed, permitting the evaluation of variations in vocabulary assessment scores which were conducted on four separate occasions both within and between groups. The empirical findings reveal a notably higher level of achievement within the gamification environment as opposed to the storytelling milieu, resulting in more substantial lexical advancements. Accordingly, this study ascertained that the integration of educational games as a pedagogical strategy with young learners serves to enhance vocabulary acquisition. Furthermore, the research uncovered the salient influence of repeated exposure on the expansion and retention of acquired vocabulary over time. In light of these findings, this study advocates for a more intensive integration of educational games within language instruction, particularly in the context of children embarking on the journey of learning English as a foreign language.

Keywords: Episodic memory, gamification, storytelling, vocabulary acquisition, EFL young learners

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Introduction

Learners' ability to acquire a language is greatly influenced by their vocabulary (Cameron, 2001). It is recognized that vocabulary links the four main skills: Listening, speaking, writing, and reading. According to Laufer and Nation (2016), the acquisition of a substantial vocabulary is essential for the proficient utilization of a second language because it empowers students to effectively employ linguistic structures and functions. In a similar vein, Susanto (2017), highlights the importance of lexical knowledge for developing conversational skills and expanding one's vocabulary in a second language. To draw the importance of vocabulary instruction, Thornburry (2002), asserts that teaching words is a fundamental component of learning a language. However, instruction needs to account for the traits of young learners, who tend to lose interest quickly due to their short attention span and desire for enjoyment while learning. In order to make language learning exciting and instructional, Cameron (2001), suggests that cartoons, realia, songs, games, puppets, and toys are appropriate materials that might excite young learners' imaginations. Bruder (2014), distinguished between "games" and "gamification, the latter of which is defined as employing game concepts and gamified thinking to improve engagement. Additionally, it should be noted that to qualify as a "gamification activity," the entire group or all participants must be proficient in using the game's ideas and tactics.

Gamification is the process of applying game mechanics to non-game contexts. It enhances the performance of learners by drawing their attention to the task, motivating them to participate, and increasing the flow to accomplish maximum achievement. Integrating games into the methodology increases class participation, and it offers lots of benefits to young learners (Gruss, 2016). Playing games allows students to learn a language more quickly and readily while also boosting their enthusiasm and self-confidence (Wang, 2011).

Working memory is beneficial for a variety of cognitive tasks because it can temporarily store a finite quantity of information in an accessible state (Adams et al., 2018). In addition to choosing which information should be retained in long-term memory, it plays a crucial part in decision-making. According to Cowan (2017), working memory is a set of mechanisms that temporarily preserves a limited quantity of information in a state of greater availability for use in current processing. Working memory not only temporarily stores new knowledge but also determines what to do with it, such as what to do next or how to react right away to an emergency. In relation to language acquisition, episodic memory helps retrieve a previous experience in acquiring new input processes. Episodic memory is the link between one's relations between their environment, experience, and input (Tulving, 2002). The episodic memory begins to form at the age of 4 and deteriorates as people become older (Riggins et al., 2015). According to Fansury & Januarty (2018), semantic and episodic memory play an important part in language recall. Examples of episodic memory types include creating a classroom environment that is similar to a daily life situation (such as a cafe), asking students to keep diaries and build new language skills upon it, using authentic materials, etc. In relation to working memory, the best fit for the combination of episodic memory and language acquisition is 'storytelling'. This approach has the advantage of engaging students' working memory and episodic memory, enabling them to connect their personal experiences with recently learned material, a process referred to as internalization.

Research Purpose and Problem

Within the EFL setting, a conspicuous gap exists in research that directly assesses the effectiveness of storytelling and gamification techniques, despite the extensive investigation into diverse methods aimed at improving vocabulary skills in second language acquisition. Accordingly, the purpose of this study is to assess the impact of gamification and storytelling on young learners' EFL vocabulary retention. To undertake the study, the following research questions have been incorporated:

1. To what extent does gamification facilitate the vocabulary retention of EFL young learners?
2. To what extent does storytelling facilitate vocabulary retention in EFL young learners?
3. To what extent do the storytelling and gamification groups make progress in vocabulary retention over time?

Method

Sample and Population

According to Piaget's theory, 7-11 years are in an operational stage of cognitive development and can solve concrete (hands-on) problems logically. However, they are not able to solve abstract problems (as cited in Woolfolk & Nicolich, 1980, p. 53). Consequently, the study's participants comprised 40 Turkish fourth-grade students from two classes, aged between 9 to 10 years old by which time they had been studying English as a foreign language for four years.

Data Collection Tools

To assess the gained vocabulary knowledge of the students in both groups, four sets of vocabulary exams comprised of 12 vocabulary items were employed. For the storytelling group, a total number of 25 animal stories for young children have been used. 7 target vocabulary items including *whale, camel, leopard, elephant, kangaroo, crab, and butterfly were practiced with Rudyard Kipling's Just So stories (Kipling, 1902); 'How the Whale got his Throat', 'How the Camel got his Hump', 'How the Leopard got his Spots', 'The Elephant's Child', 'The Sing-Song of Old Man Kangaroo', 'The Crab that Played with the Sea', and 'The Butterfly that Stamped'*. The other vocabulary items were utilized from the Aesop for children (Aesop & Winter, 1919). On the other hand, the gamification group received online game training to acquire the target vocabulary (https://www.eslgamesplus.com/).

Data Collection and Analysis

The SPSS (Statistical Package for Social Sciences) for Windows 22 program was used to record and analyze the data. Before choosing the tests (parametric or nonparametric tests) to run on the data, the presumptions were tested. The distribution's normality was determined using the Kolmogorov-Smirnov, kurtosis, and skewness values, further tenets of the normal distribution. The difference between the dependent groups was examined by the Repeated ANOVA test in the independent sample t-test (Independent sample t-test) comparison of two independent groups. The determination of whether the obtained values were significant was made using the significance threshold of 0.05 as a criterion. In terms of procedure, both groups of students were asked to match the vocabulary items with the pictures. Twelve vocabulary items from the pool of 48 words were randomly chosen for the vocabulary tests.

Intervention Program

The intervention program involves practicing a set of 48 vocabulary items divided into 12 vocabularies of the weekly planning. Both groups practiced the target vocabulary using flashcards. However, the gamification group was trained by online flashcards. Additionally, the storytelling group used paper-based stories while the gamification group received training using online game tools. The stories that included the target vocabulary items were deliberately chosen as they provide context-based learning.

Table 1

Target Vocabulary and Instruments Weekly Modules

	Target Vocabulary	Storytelling	Gamification
Week 1	Dog-goose-frog-ox-rabbit-weasel-cat -raven-swan-peacock-crane-pigeon	The **Dog** and the shadow The **Goose** & the Golden Egg The **Frog**s & the **Ox** The **Rabbit**, the **Weasel**, & the **Cat** A **Raven &** a **Swan** The **Peacock &** the **Crane** The thirsty **Pigeon**	Spin the wheel game
Week 2	Wolf-sheep-lion-mouse-goat-tortoise-ducks-monkey-dolphin-ant-grasshopper-pig	The **Wolf** & the **Sheep** The **Lion** & the **Mouse** The Two **Goat**s The **Tortoise** & the **Duck**s The **Monkey** & the **Dolphin** The **Ant**s & the **Grasshopper** The Sheep & the **Pig**	Online crossword
Week 3	Crab-butterfly-whale-camel-leopard-elephant- kangaroo-bear-bees- cock-fox-snake	The **Crab** that Played with the Sea The **Butterfly** that Stamped How the **Whale** got his Throat How the **Camel** got his Hump How the **Leopard** got his Spots The **Elephant**'s Child The Sing-Song of Old Man **Kangaroo** The **Bear** & the **Bees** The **Cock** & the **Fox** The Farmer & the **Snake**	Online scrabble
Week 4	Zorilla-aardvark-coyote-flamingo-giraffe-jellyfish-koala-orangutan-tarantula-vulture-walrus-yak	Short stories Zoo Transcript (https://www.calameo.com/books/0066889393cb354d3391e)	Online storytelling

Findings

Table 2

The Comparison of Word Recall Success Between Groups and Time

	Game-based vocabulary teaching		**Story-based vocabulary teaching**		**t**	**p**
	Mean	Standard deviation	Mean	Standard deviation		
1st exam	83,59	15,38	82,58	13,72	0,28	0,78
2nd exam	88,64	12,47	76,52	17,11	3,29	0,01
3rd exam	88,64	12,47	75,76	15,64	3,70	0,01
4th exam	88,89	12,61	84,09	11,67	1,60	0,11
	*F:8,29; p:0,01 mean :1<2,3,4		**F:1756,6; p:0,01 mean:2,3<4			

**Greenhouse-Geisser*
***Sphericity Assumed*
t: Independent sample t test

The success rate of word recall in the gamification group shows a statistically significant difference between the exams conducted over time (F:8.29; p<0.05). When comparing the exam results using the Bonferroni method it is seen that the 1st exam results were significantly lower than 2, 3, and 4.

The success rate of word recall in the storytelling group shows a statistically significant difference between the exams conducted over time (F:1756.6; p<0.05). When looking at the difference between the exams by using the Bonferroni method, the 2nd and 3rd exams were found to be significantly lower than the 4th exams.

The independent sample t-test was then applied to examine whether each exam conducted showed a difference between the gamification and the storytelling groups. It was found that the 2nd and 3rd exams showed a statistically significant difference between groups. When the average values were taken into account, the word recall success percentage of the group that was taught vocabulary with games was higher than the group that was taught vocabulary by storytelling (p<0). It was found that the 1st and 4th exams did not show a statistically significant difference between groups (p>0.05).

Discussion and Result

The current study enables a comparison of the effectiveness of storytelling and gamification methods on Turkish elementary students' ability to learn and maintain vocabulary. According to the statistics, the participants in the gamification group excelled in vocabulary recognition and retention. The impact of exposure on the growth of the acquired vocabulary was another finding of the study. As a result, both groups showed progress over time regarding language retention.

The findings of the present study lend support to previous studies (e.g., Flores, 2015; Butler, 2015; Calvo-Ferrer, 2017; Jackson, 2017; Wu, 2018; Hitchen & Tulloch, 2018; Zou et al., 2019; Kurt, 2021) demonstrating how the gamification strategy efficiently aids students in increasing their vocabulary knowledge. In this regard, Costabile et al. (2003), suggest that younger generations might gain more from playing immersive games because their components are noted to maximize success and improve EFL vocabulary acquisition performance. Similarly, Wu (2015), compared the traditional paper-based learning approach with a mobile game-like APP. The findings showed that in terms of learning achievement, a mobile game-based method performed better than a paper-based one.

On the other hand, the past research on vocabulary acquisition through stories (Shepard, 1996; McGee & Richgels, 2000; Morrow, 2001; Dujmović, 2006; Barreras Gómez, 2010; Kazazoğlu & Bilir, 2021) emphasizes the benefits of learning English through storytelling. As technology integration advances across generations, educators must modify their teaching strategies to accommodate a variety of learning styles. Due to its proven capacity to maintain student involvement by stimulating their episodic memory, storytelling has traditionally been used as a highly successful way for teaching vocabulary in second language education. Nevertheless, due to the popularity of video games and the simple accessibility of other types of internet resources, young learners are becoming more accustomed to a range of stimuli. Considering this, offering a gamified educational framework to young students may be more beneficial than seeking to exclude them from the world of these captivating games.

Recommendations

A significant paradigm change in education has occurred in recent decades due to technology gradually replacing several traditional pedagogical approaches. In contrast to past cohorts who learned and adapted to become technologically proficient, younger generations are innately steeped in technology from birth. The results of this study highlight how rapidly developing technology is altering generational dynamics and the nature of schooling. Even tried-and-true instructional techniques like storytelling eventually experience diminishing returns. In the modern day, stronger stimuli are essential to achieve successful learning. Technology outperforms storytelling in terms of improving working memory capacity, even though both can engage different cognitive regions and create links between recently learned information and prior knowledge. It is crucial to understand that the storytelling paradigm needs to be modified to include new, practical strategies, even though it has not been deemed obsolete. Additionally, gamification features, such as progress bars, point systems, time constraints, and randomization, provide pupils with a sense of urgency that motivates them to perform above expectations. Teaching through multimodal approaches that incorporate suitable stimuli and tools is highly effective on vocabulary acquisition among a sample of today's young learners in Türkiye, and should be prioritized accordingly.

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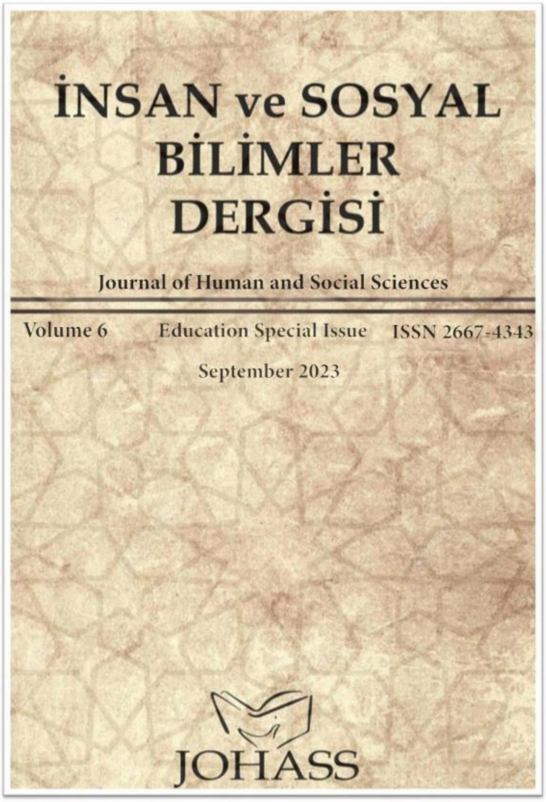

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The Effect of Environmental Awareness Education Program on Children's Environmental Awareness

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The Effect of Environmental Awareness Education Program on Children's Environmental Awareness*

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Abstract **Research Article**

Education programs are learning experiences that take place with planned activities offered to the individual and contribute to the upbringing of people in society and the realization of goals related to them. The aim of this study is to examine the effect of the environmental awareness education program applied to preschool children on children's environmental awareness. The study group of the research consisted of a total of 41 children, 20 children in the control group and 21 children in the experimental group, who were studying in kindergarten classes affiliated to the Ministry of National Education and had not participated in any environmental education program before. This study has a pre-test post-test control group experimental design. According to this design, the application of the pre-test, the application of the environmental awareness education program and the application of the post-test are carried out respectively. "Personal information form" and "Environmental awareness scale for children" were used as data collection tools in the study. The data were analyzed with SPSS statistical package program. According to the findings of the study, it was found that the environmental awareness education program was effective on the environmental awareness of preschool children.

Keywords: Environment, environmental education program, environmental awareness, preschool

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Introduction

The environment is the place where a person receives support to meet basic needs such as eating, drinking and shelter as well as psychological needs. With the increase in industrial waste and the advancement of technology, environmental problems have also increased (Dorninger et al., 2017; Saravanakumar, 2020).

There are many research and report results showing that environmental problems are increasing and this situation negatively affects living life (IPCC, 2022). According to the 2022 Global Risks Report, five different environmental problems are included in the list of the top ten risks expected in the next decade. For this reason, it has become imperative to take measures against environmental problems, and many concepts such as environmental awareness, environmental consciousness, and environmentally friendly behavior have emerged as a result of the studies carried out to develop environmental protection behaviors (Engin et al., 2020; Erol & Ogelman, 2021).

Since the second half of the 20th century, the sensitivity shown to environmental problems and the approaches to be taken to solve these problems have been gaining importance day by day (Kışoğlu et al., 2010). An effective solution to environmental problems is the existence of individuals with environmental awareness, which is indispensable in creating a livable and sustainable environment. It has become a necessity to raise individuals with environmental sensitivity and environmental awareness in order to ensure that future generations can live in a healthier, natural and safe environment (Şahin et al., 2004). It is only possible for people to have sufficient knowledge about the environment, to create sensitive and positive behavioral changes, to protect nature and to regain damaged areas only through education (Yazkan, 2012).

Education programs contribute to the upbringing of people in society and the realization of goals related to them. In other words, education programs are the learning experiences that take place with planned activities offered to the individual (Demirel, 2011).

Environmental education, which provides environmental awareness, is a learning process that aims to gain knowledge, skills and experience to solve environmental problems (Balkan Kıyıcı, 2009). Environmental education is a lifelong interdisciplinary approach that deals with the environment and environmental problems through education and tries to give individuals environmental sensitivity, knowledge, skills, motivation, personal and social responsibility (Moseley, 2010). Environmental education offers solutions to problems that may arise as well as problems related to the environment. In addition, environmental education programs form the basis for environmentally friendly behaviors by developing environmental attitudes (Kaiser et al., 1999). The main purpose of a successful environmental education is to develop environmental awareness by increasing children's environmental knowledge, to protect social and cultural values, to gain positive permanent behavioral change, and to provide solutions by ensuring active participation at every stage of the environmental problem (Arık, 2017; Kışoğlu et al, 2010; Şimşekli, 2004). According to Gülay and Önder (2011), a qualified environmental education should include science-related, problem-solving-based and experiential learning, critical thinking, family involvement, values education and the presence of effective social role models. According to Pearce 1977, environmental education is critical for a child's developing brain and intelligence.

The most effective time in providing permanent behaviors and forming habits is the preschool period. The quality of the program implemented in the preschool period increases the impact on the child and creates a basis for the following years (Gürkan, 1992; Kaga, 2008). Environment-themed activities in early childhood make it more possible for children to have a positive attitude towards the environment in their later years (Yoleri, 2012: 102). It is known that children who interact with the environment and spend time in open spaces are positively affected by their relationship with the environment (Dunlap et al., 2000; Frantz et al., 2005). In order to find solutions to environmental problems, individuals need to re-establish their connection with the environment (Braun & Dierkes, 2017).

In general, environmental education in the preschool period is important in terms of nurturing the child's personality and mind, developing solutions to ecological problems, and raising conscious individuals who respect their environment (Başal, 2005; Büyüktaşkapu, Koçyiğit, Öztürk-Samur, & Özenoğlu-Kiremit, 2011; Gülay Ogelman & Güngör, 2015).

There are many studies on environmental education in the literature (Akdağ & Erdiler, 2006; Ahi & Alisinanoğlu, 2016; Büyüktaşkapu Soydan & Öztürk Samur, 2017; Aydın & Aykaç, 2016; Aysu, 2019; Caner, 2019; Demirdirek, 2019; Çabuk & Uçar Çabuk, 2017; Dinçel, 2019; Dilli & Bapoğlu Dümenci, 2015; Durkan et al., 2015; Gülay Ogelman & Durkan, 2014; Erdoğan, 2016; Çabuk & Haktanır, 2010; Kahyaoğlu, 2016; Kesicioğlu & Alisinanoğlu, 2009; Küçük, 2017; Taşkın & Şahin, 2008; Tırpancı, 2019; Toprak, 2017; Yıldırım, 2015; Şallı, Dağal et al., 2013; Olgan & Kahraman-Öztürk, 2011; Özdemir & Uzun, 2006; Yaşar et al., 2012; Yılmaz & Olgan, 2017). In the related studies, the short or long-term effects of environmental education on children are mentioned and its importance in early childhood is emphasized. It is also frequently emphasized in different studies that environmental education should be given in early childhood (Clayton, 2003; Dresner & Blatner, 2006; Russo, 2001; Vadala et al., 2007; Yılmaz et al., 2020).

When the literature is examined, it is stated that experimental studies on environmental education are mainly conducted at primary and secondary education levels (Yılmaz et al., 2020). It is thought that the reason underlying the environmental problems that are increasing day by day is that individuals do not have environmental awareness and this will only be possible with a long-term environmental education experience starting from early childhood (Genç & Karabal, 2010). In addition, the limited number of experimental studies on environmental awareness education with preschool children and the rarity of studies investigating the environmental program in out-of-school educational environments reveal the originality of the study. In this direction, it is thought that the study is important in terms of preschool children's environmental awareness, ensuring permanent learning in children, transferring it to the later periods of children's lives and will contribute to the literature at these points. In this context, the aim of the study is to examine the effect of the environmental education program applied to preschool children on children's environmental awareness. In line with this purpose, the research seeks to answer the question "Does the environmental awareness education program applied to preschool children affect children's environmental awareness?".

Method

Model

This study has an experimental design with pretest-posttest control group. Experimental research is research conducted using a systematic methodology to determine to what extent a particular intervention will be effective in solving a certain problem under controlled conditions (Özmen, 2015). Studies using experimental design with pretest-posttest control group are frequently encountered in education and psychology (Büyüköztürk et al., 2012). In this study, the experimental design was preferred since it was aimed to determine to what extent the environmental awareness education program was effective in helping preschool children gain environmental awareness.

Research and publication ethics were complied with in the study. Ethical approval was obtained from Osmaniye Korkut Ata University Social Sciences Scientific Research and Publication Ethics Commission for this research (Date: 09.05.2023, Number: 2023/5/6).

Study Group

The study group was determined by criterion sampling, one of the purposeful sampling methods. The study group of the research consisted of a total of 41 children, 20 in the control group and 21 in the sample group, who were studying in two different kindergartens of a primary school and had not participated in any environmental awareness education program before. Eighteen of the children were girls and 23 were boys. The average age of the children was 71 months.

In the sample group, 13 of the children were girls and 8 were boys. 7 of them are 48-71 months old and 14 of them are 72-84 months old. The mothers of 16 children were working, the mothers of 5 children were not working, the fathers of 17 children were working and the fathers of 4 children were not working. The mother of 6 children is a high school graduate, the mother of 13 children is a bachelor's degree graduate and the mother of 2 children is a postgraduate degree graduate. The father of 5 children graduated from high school, the father of 14 children graduated from undergraduate school, and the father of 2 children graduated from graduate school.

In the control group, 11 of the children were girls and 9 were boys, 11 were 48-71 months old and 9 were 72-84 months old. The mothers of 13 children were working, the mothers of 7 children were not working, the fathers of 14 children were working and the fathers of 6 children were not working. The mother of 5 children is a high school graduate, the mother of 10 children is a bachelor's degree graduate and the mother of 5 children is a postgraduate degree graduate. The fathers of 4 children are high school graduates, the fathers of 8 children are undergraduate graduates and the fathers of 8 children are graduate graduates.

Data Collection Tools

In this study, "Personal information form" and "Environmental awareness scale for children" were used as data collection tools.

Personal Information Form

In the personal information form, there are questions to determine children's age, gender, parents' employment status and educational status.

Environmental awareness scale for children: It was developed by Gezgin Vural and Kılıç Mocan (2022) to determine the level of environmental awareness for preschool children. The scale consists of 24 questions and each question has three visual elements for the child to answer. The lowest score that can be obtained from the environmental awareness scale for children is 0 and the highest score is 24. The answers given to the test were evaluated as 1 if they were correct and 0 if they were incorrect or unanswered. The Cronbach's alpha value of the test was 0.75. When necessary, questions and options were repeated with vocalization. The cards containing the visuals on which the answer options were presented were prepared in a size and content appropriate for the age group of the children. A sample item from the scale form is given below:

"Which of the following does not occur in autumn?"

Leaves Fall   Rain falls   Trees Turn Green

Environmental Awareness Education Program and Data Collection Process

Before the data were collected, the literature on the environmental awareness education program was reviewed in detail and the program was prepared.

While preparing the environmental awareness education program, Wilson's (1996) principles that should be considered in environmental awareness education practices were taken into consideration. These are:

The program should start with simple practices in which children can feel safe and active participation of children should be ensured.

Children should have fun and interesting experiences. The pleasure to be derived from environmental education is as important as the content.

Experiences should be prioritized in environmental education and all emotions of children should be involved.

Educational practices should be carried out by utilizing different methods and techniques.

Children should be made to understand that all components of the natural world are together and in interaction.

In order to create children's interest in the natural world, they should be modeled and a warm and friendly environment should be created.

Environmental education practices should be carried out outdoors as much as possible.

The beauty of the environment should be emphasized and children should be given the opportunity to interact with nature.

Learning should be based on understanding concepts and analysis rather than rote learning and learning based on patterns.

Activities that enable children to interact with natural elements such as different plants, animals, water and soil should be carried out.

Activities should promote social interaction, cooperation and collaboration among children.

Based on the principles above, the environmental awareness education program is composed of different methods and techniques that are play-based, aimed at supporting children's development and ensuring the active participation of children. In addition, the program was prepared to attract children's interest and to be carried out in an open area as much as possible. The prepared program was presented to 5 faculty members who are experts in their fields and the final version of the program was created in line with the recommendations of the experts. In this study, research and publication ethics were followed. Ethical approval was obtained from Osmaniye Korkut Ata University Social Sciences Scientific Research and Publication Ethics Commission (Date: 09.05.2023, Number: 2023/5/6). In addition, the parents of the children participating in the study were asked to fill out an informed consent form. The children of the parents who gave consent were asked whether they wanted to participate in the study. The research was conducted with the children who wanted to participate in the study. After the environmental awareness program was prepared, "General information form" and "Environmental awareness for children" form were applied to the sample and control group children as pre-test.

The environmental awareness education program, which was prepared to support preschool children's environmental awareness, was applied to the children in the sample group a total of 8 times, twice a week, with a meeting and a closing meeting. During the program, children were given a brief reminder about the previous week's topic, followed by the week's implementation and the implementation ended with the evaluation of the activity. The program was carried out in different places such as school garden, forest area, picnic area. Within the scope of the environmental awareness education program, topics such as the environment, the importance of environmental awareness, water, air, soil, recycling, beautification and protection of the environment were discussed and practices were carried out by ensuring children's interaction with nature. After the environmental awareness education program practices were completed, "Environmental awareness scale for children" was applied to the children in the sample and control groups as a post-test at the closing meeting.

Figure 1

Pictures from The Activity

SPSS statistical package program was used to evaluate the data. In the analysis of the scale variables, it was determined that the skewness and kurtosis values of the data took values between -1 and +1. According to these results, it was determined that the scale variables showed normal distribution (Hair et al., 2013). In the evaluation of the data, descriptive statistics, Continuity Correction and Pearson Chi-Square tests were used to determine the differences between the sample and control groups according to socio-demographic groups. The dependent t-test was used to determine whether there was a significant difference between the sample and control groups, and the independent sample t-test was used to compare the sample and control groups. Statistical significance level was taken as $p<0.05$.

Compliance with Ethical Standard

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Findings

The findings obtained within the scope of the research are presented below. Socio-demographic information of the children is shown in Table 1.

Table 1

Socio-demographic Characteristics of Children.

Socio-demographic variables		Sample (N=21)	Control (N=20)	p
		N (%)	N (%)	
Gender*	Female	13 (54,2)	11 (45,8)	0,895
	Male	8 (47,1)	9 (52,9)	
Age*	48-71 mounts	7 (38,9)	11 (61,1)	0,279
	72-84 mounts	14 (60,9)	9 (39,1)	
Mother Occupation*	Government	10 (47,6)	11 (52,4)	0,873
	Private	11 (55)	9 (45)	
Father Occupation*	Government	4 (36,4)	7 (63,6)	0,424
	Private	17 (56,7)	13 (43,3)	
Mother's Employment Status*	Working	16 (55,2)	13 (44,8)	0,657
	Not working	5 (41,7)	7 (58,3)	
Father's Employment Status **	Working	17 (54,8)	14 (45,2)	0,484
	Not working	4 (40)	6 (60)	
Mother's Education**	High school	6 (54,5)	5 (45,5)	0,482
	Undergraduate	13 (56,5)	10 (43,5)	
	Post graduate	2 (28,6)	5 (71,4)	
Father's Education **	High school	5 (55,6)	4 (44,4)	0,073
	Undergraduate	14 (63,6)	8 (36,8)	
	Post graduate	2 (20)	8 (80)	

***** Continuity Correction ** Pearson Chi-Square *** Row percentage is taken.

It was determined that there was no significant difference between the socio-demographic characteristics of the children and the sample and control groups.

The results of the independent samples t test applied to the pre-test scores of the children in the control and sample groups are shown in Table 2.

Table 2

Independent Samples t Test Results for The Comparison of Pre-Test Scores in The Control And Sample Groups

Groups-pre-test	**N**	**$\overline{X}$**	**sd**	**t**	**p**
Control group	20	0,75	0,12	1,604	0,117
Sample group	21	0,81	0,14		

*p<0,05

When the results of the independent samples t-test are analyzed in Table 1, the mean pre-test score of the control group was found to be 0.75 and the mean pre-test score of the sample group was found to be 0.81. The calculated p value (0.117) was found to be statistically significant at a level greater than 0.05. Accordingly, it is seen that there is no significant difference between the pre-test mean scores of the children in the control and sample groups. This result shows that the groups' prior knowledge on the subject is at a similar level. In other words, it can be said that the experimental application was carried out with two homogeneous groups in terms of environmental awareness.

The results of the dependent groups t test for the control group are given in Table 3.

Table 3

Dependent Groups t Test Results for The Comparison of Pre-Test and Post-Test Scores in The Control Group

	N	**$\overline{X}$**	**sd**	**t**	**p**
Pre-Test	20	0,75	0,12	3,216	0,005*
Post-Test	21	0,82	0,12		

*p<0,05

When the t-test results of the dependent groups in Table 3 were analyzed, the mean pretest score of the control group was 0.75 and the mean posttest score was 0.82. The p value (0.005) showed a statistically significant difference between the pretest and posttest scores of the children in the control group.

In order to determine whether the pre-test and post-test mean scores of the children in the sample group were statistically different from each other, the data were analyzed with the t-test in dependent groups and the results of the analysis are shown in Table 4.

Table 4

Dependent Groups t Test Results for The Comparison of Pre-Test and Post-Test Scores in The Sample Group

	N	$\bar{X}$	sd	t	p
Pre-Test	20	0,81	0,14	3,179	0,005*
Post-Test	21	0,92	0,07		

*p<0,05

When the results obtained in Table 4 are analyzed, the mean pretest score of the sample group was 0.81 and the mean posttest score was 0.92. The difference between the mean scores was statistically significant (p: 0.005).

An independent samples t-test was conducted to determine whether the post-test mean scores of the groups were statistically different from each other. The results of the independent samples t test applied to the post-test data are shown in Table 5.

Table 5

Independent Samples t Test Results for The Comparison of Post-Test Scores in The Control and Sample Groups

Groups	N	$\bar{X}$	sd	t	p
Control groups	20	0,82	0,12	3,107	0,004*
Sample groups	21	0,92	0,07		

*p<0,05

When the independent samples t-test results in Table 5 are analyzed, the mean posttest score of the children in the control group was 0.82, while the mean post-test score of the children in the sample group was 0.92. The difference between the posttest mean scores of the groups was statistically significant (p:0,004).

Discussion and Results

In this study, which was conducted to determine the effect of the environmental awareness education program on the environmental awareness of preschool children, it was determined that the posttest mean scores of the children in the sample group were significantly higher than the pretest mean scores. It is thought that the environmental awareness education program had an effect on the increase in the posttest scores of the children in the sample group. In other words, this situation can be explained by the positive effect of the environmental awareness education program on children's environmental awareness. In a similar study conducted by Emsal Aydın (2018), it was concluded that the "Tiny Tema Education Program" prepared by the Tema Foundation was effective on the attitudes of 60-72-month-old children towards the environment. In another similar study, Heras et al. (2020) evaluated the change in the perceptions of 22 students after a nature trip. As a result of the study, it was found that outdoor and nature-based education supported children's physical, cognitive, emotional and social development as well as their acquisition of environmentally friendly behaviors. In another similar study, Karimzadegan (2015) found that an environmental education program increased preschool children's environmental knowledge and positive attitudes towards the environment. As a result of the research, there is a significant difference between the post-test scores of the control and sample groups in which the environmental awareness education program was implemented. It was determined that the posttest scores of the children in the sample group were higher than the posttest scores of the control group children. Similar to this study, in the experimental study conducted by Gezgin Vural and Kılıç Mocan (2022) to determine the effect of science activities on the environmental awareness of preschool children, science activities were applied to the children in the sample group, while the activities in the preschool education program continued to be applied to the children in the control group. As a result of the study, it was determined that science activities gave successful results in raising environmental awareness in preschool children in the sample group. In the study conducted by Lisman (2010), the changes in the environmental awareness of the 3rd and 5th grade participants of the program prepared to examine the effects of the urban environmental education program on children's awareness of their local biophysical environment were examined. As a result of the study, it was found that the program had a significant and positive effect on students' awareness of the local environment and their knowledge of the concept of environment.

As a result of the research, a statistically significant difference was found between the control group pre-test and post-test scores. It was determined that the post-test scores of the control group were higher than the pre-test scores. Within the scope of this study, the children in the control group continued the MEB 2013 Preschool Education Program in their classrooms and implemented environmental activities in line with the education program. It can be thought that the continuation of preschool education and the implementation of environmental activities in their classrooms were effective in increasing the post-test scores of the children. According to Gülay (2011), environmental education programs can be effective on children's attitudes and behaviors in the short or long term and can cause changes. In order for the studies on environmental education to be effective, it has been suggested that the subjects and teaching methods should be diversified and presented to children (Gülay, 2011). The implementation of the environmental awareness education program by using different methods and techniques such as excursion, observation, art, drama can be considered to increase the effectiveness of the program on children. In addition to having a positive effect on children, environmental education programs are thought to positively affect the attitudes of the teachers of the class in which the program is implemented. In their study, Temiz et al. (2018) organized an applied training program for preschool teachers to prepare nature-based science, mathematics and art activities (using nature and natural materials). At the end of the program, it was concluded that teachers prepared various activities using nature and natural materials. In Şimşekli's (2004) study, the environmental knowledge levels of primary school students who participated in environmental education activities to develop environmental awareness were increased. In the study conducted by Robertson (2008) with children, an environmental education program was applied to children and it was found that children's environmental attitudes were positively affected after the environmental education program. In another similar study conducted by Tanrıverdi (2012), it was determined that the education given with creative drama had an effect on environmental awareness.

In the effective implementation of environmental education programs, it is important to prepare the learning environment in accordance with the purpose (Ergazaki et al., 2012). In the implemented environmental awareness education program, the researchers made the necessary preparations before each application and made the place where the application would be carried out ready before the children arrived. This can be considered to increase the effectiveness of the environmental education program. Yalçın (2013) included environmental education practices in his study aiming to determine the effect of an environmental education program including activities to protect the natural environment on preschool children's attitudes towards the environment and concluded that the program to protect the natural environment had a positive effect on children's attitudes towards the natural environment. In another similar study, Özdemir and Uzun (2006) conducted science and nature activities based on the Green Classroom Model to determine preschool children's perceptions of the environment and found that activities based on the Green Classroom Model, which provides direct interaction with natural materials, had a significant effect on children's perceptions of the environment.

Children begin to recognize the environment and develop attitudes towards the environment from an early age (Basile, 2000). According to Wilson (1993), if children do not develop positive attitudes towards environmental problems at an early age, it becomes difficult for them to develop such attitudes in their later years. As seen in the literature, it can be quite difficult to change negative environmental attitudes formed in the early years of childhood (Davis, 2009; Samuelsson & Kaga, 2008; Siraj-Blatchford, 2009). It is extremely important to emphasize the importance of environmental education in the preschool period and for children to spend time with the environment at an early age. According to Louv (2019), the physical and spiritual senses of children who spend less time in nature atrophy. With the information provided in environmental education, it is thought that the child's development is positively affected and new behaviors and abilities develop (Erten, 2004). Again, according to Ull et al. (2014), early childhood education is thought to be effective on children in acquiring values, attitudes, behaviors and knowledge. Köşker (2013) also states that educational experiences in nature in preschool and primary school will facilitate individuals to gain awareness at an early age, to establish an effective and meaningful connection with nature and to maintain this throughout their lives. Similar studies (Cevher Kalburan, 2009; Erten, 2005; Kurt Gökçeli, 2015; Yoleri, 2012) also emphasize the importance of environmental education in preschool period. In line with the findings obtained within the scope of the study, the following suggestions can be made:

- Environmental education programs can be prepared with different environmental activities.
- Longer-term environmental education programs can be prepared with environmental activities with family participation.
- The effect of environmental education program on different variables such as environmental awareness and environmental attitude can be investigated.
- The effect of the environmental education program prepared for different age groups can be investigated.

Compliance with Ethical Standard

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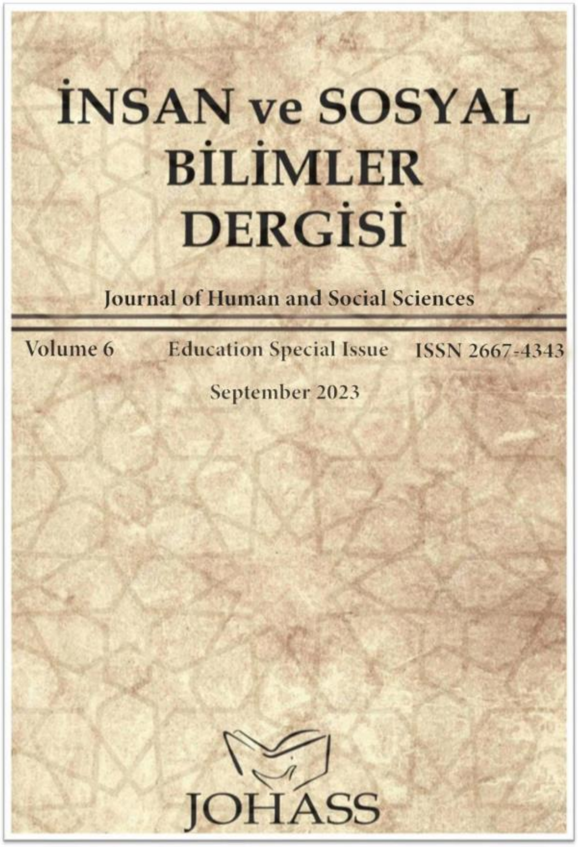

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Self-Efficacy Scale for Turkish Lesson: A Study of Validity and Reliability

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Self-Efficacy Scale for Turkish Lesson: A Study of Validity and Reliability

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Abstract **Research Article**

A significant role is played by the idea of self-efficacy, which involves students' perceptions of their unique skills and ability to do well in Turkish lectures. The purpose of this study is to create a measurement tool that is both valid and reliable for assessing secondary school students' self-efficacy toward Turkish language instruction. In the 2022–2023 academic year, 420 kids who are enrolled in the fifth, sixth, seventh, and eighth grades at four different public secondary schools in Aksaray city center make up the study group. The package applications AMOS 24.00 and SPSS 22.00 were used to analyze the data. To test the scale's construct validity, factor analysis was done. The exploratory factor analysis produced a 4-factor scale with 23 items as a result. A total of 52.088% of the variance is explained by the scale. The scale's 4-factor structure was verified by confirmatory factor analysis. The fit indices derived by confirmatory factor analysis were found to exhibit satisfactory or outstanding fit. The reliability of the scale's items was evaluated using analyses, and it was found that the scale's Cronbach's Alpha internal consistency coefficient was .89. The research's findings demonstrate that the scale that was created in response to them is a reliable and valid measurement tool for assessing secondary school students' self-efficacy toward Turkish courses. The self-efficacy of fifth, sixth, seventh, and eighth-grade pupils toward Turkish classes can be assessed using this scale.

Keywords: Turkish lesson, self-efficacy scale, scale development, validity and reliability study, secondary school students

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Introduction

Self-efficacy belief is individuals' awareness of their skills and abilities in the process of organizing, organizing, and carrying out actions, and plans to achieve goals. In other words, it is the perception that individuals individually evaluate the extent to which they can perform the actions they need regarding all kinds of events, facts, and situations they encounter in their daily lives (Bandura, 1982; Bandura, 1997). Self-efficacy can be defined as an individual's belief in his/her abilities and capacity to regulate and perform the behaviors expected of him/her in any field (Sallabaş, 2012). The most important element of self-efficacy belief is shown as the initiation (taking action) and maintenance (continuing action) of behaviors. Self-efficacy also plays an important role in effective interventions for emotional and behavioral problems (Maddux, 1995). Research shows that students' cognitive power, direction, persistence, and desire affect the achievement process. Since Bandura's concept of self-efficacy in 1977, self-efficacy theory has examined how self-efficacy affects learning, motivation and achievement in educational settings and the impact of instructional and social factors on self-efficacy (Bandura, 1977; Schunk, 1995, Zimmerman, 1990).

Self-efficacy is directly related to self-efficacy beliefs in terms of the behaviors that individuals will follow, how much effort they will make, how long they will endure the obstacles they face, their ability to overcome difficulties and their resilience, their metacognitive processes in the face of problems, their awareness of depression, anxiety, and obstacles they experience. The higher the self-efficacy beliefs of individuals, the more likely they are to cope with the obstacles and difficulties they face and to make efforts in this direction. On the contrary, individuals who doubt their self-efficacy beliefs tend to avoid the threats and difficulties they face. These individuals have very low expectations for work and processes and give up very quickly in the face of adversy (Bandura, 1994). Self-efficacy is based on four basic resources that interact with each other. These basic sources are shown in Table 1 (Bandura, 1977, p. 195).

Tablo 1

Sources of Self-Efficacy

Source	The Inductive Model
Performance Achievements (Key Experiences)	Participant modeling Performance desensitization Exposure to performance Self-directed performance
Indirect Experience (Experience)	Live modeling Symbolic modeling
Verbal Persuasion	Recommendation Recommendation (encouragement) Self-instruction Interpretive therapies
Physiological and Psychological State	Authenticity Relaxation, biofeedback Symbolic desensitization Symbolic explanation

Performance achievements, i.e. core experiences, are related to the individual's past experiences. An individual's past achievements, the level of achieving goals, and the ability to cope with the problems they face positively affect self-efficacy. On the contrary, repeated failures in an individual's life affect self-efficacy negatively. However, the failures that the individual can overcome later on will strengthen the determined effort and self-motivation, which will lead to the development of self-efficacy. In the source of indirect experience (experience), the individual adapts to the new situation by observing or modeling the experiences of others in experiences that may be considered new for him/her. This will contribute to the individual's ability to fulfill individual responsibilities, make determined efforts and develop purposeful expectations. The third source of self-efficacy is verbal persuasion. With verbal persuasion, the individual is made to believe that he/she can cope with situations that have bothered him/her in the past. Through verbal expressions such as encouragement, support, suggestions, and advice, and feedback, the individual is guided and enabled to achieve success. The fourth source of self-efficacy is the physiological or psychological state of the individual. The degree of anxiety, stress, tension, etc. experienced by individuals while coping with any negative situation affects self-efficacy negatively. Therefore, the emotional arousal level of individuals should be at a certain level. Because self-efficacy is related to negative emotions such as stress, pessimism, anxiety and physical inadequacies such as hunger, fatigue, and insomnia (Bandura, 1986; Pehlivan & Aydın, 2022; Zimmerman, 2002).

When self-efficacy beliefs are strong, individuals can overcome the negative situations they encounter on their own without the need for others. Maintaining self-efficacy belief, especially in new situations encountered, is also important for the continuity of individual success. There are studies on self-efficacy, which has such an important place in an individual's life, in the field of educational sciences. In many studies conducted in the field of educational sciences, it has been determined that individuals with high self-efficacy perception have better physical and mental health, better social adaptation skills, and higher academic achievement than individuals with low self-efficacy perception (Bandura, 1997; Jerusalem & Schwarzer, 1992; Maddux, 1995). It has been observed that students with high self-efficacy participate more willingly in educational activities, work harder, and perform longer compared to students with self-doubt. While successes raise students' self-efficacy, failures lower it. However, once students gain a strong sense of self-efficacy, negative situations or failures will not have much negative impact (Bandura, 1986).

In language education, psychological factors such as attitudes, anxiety, motivation, self-efficacy, and self-efficacy affect students' learning process as well as the quality of instruction. Studies on the effect of psychological factors on student achievement show that language education is also affected by psychological processes. Knowing the language learning needs of language learners and their interests, attitudes, beliefs, and motivations towards the language they learn will contribute to the effective design of the teaching process (Pehlivan & Aydın, 2022, p.293).

Individuals perceive and interpret their environment through their mother tongue. At the same time, the individual can convey his/her feelings, thoughts, dreams, impressions, and experiences to others through his/her mother tongue. An individual's ability to use his/her mother tongue is also directly proportional to his/her ability to exist in society. For this reason, determining the self-efficacy perceptions of native Turkish-speaking students towards Turkish lessons will provide education stakeholders with very important information about students. Psychological tests developed and used in this field are used to recognize and evaluate individuals. Thanks to these tests, a general picture of the psychological readiness, interests, and needs of the groups in which educational activities will be carried out can be taken. The data obtained from the applied tests contribute to the student-centered planning, programming, and execution of educational activities.

Many studies on self-efficacy have been conducted in the field of Turkish education in recent years. In many of these studies, the effect of a method or practice on self-efficacy or the relationship between it and another variable was examined. In the literature, many scale adaptation (Epçaçan & Demirel, 2011; Demir, 2014; Demirkol, 2023; Karatay et al., 2018; Keskin & Atmaca, 2014; Yılmaz Soylu & Akkoyunlu, 2019) and development (Akkaya & Çıvğın, 2020; Çarkıt & Altun, 2020; Çocuk et al., 2015; Delican, 2017; Durukan & Maden, 2012; Güneş et al., 2017; Hasırcı Aksoy et al., 2021; Karadeniz, 2014; Katrancı & Melanlıoğlu, 2013; Kotaman, 2009; Şahin & Öztahtalı, 2019; Ulu, 2018; Ülper et al., 2013) studies have been conducted to measure students', teachers', prospective teachers' and parents' self-efficacy perceptions towards Turkish language courses and language skills. There are also scale adaptation and development studies on self-efficacy in the field of teaching Turkish to foreigners (Büyükikiz, 2012; Güngör & Kan, 2020; Kurudayıoğlu & Güngör, 2017; Sallabaş, 2013; Sevim & Varışoğlu, 2023; Tulumcu, 2014; Varışoğlu & Sevim, 2022).

Determining students' self-efficacy towards the Turkish courses will provide important data to improve their performance in the course. When self-efficacy studies in the field of Turkish education are examined, there is no study that includes all grade levels of secondary school (5th, 6th, 7th, and 8th-grades) with wide participation. There is only the self-efficacy scale developed by Durukan & Maden (2012) in the literature to measure secondary school students' self-efficacy perception towards Turkish courses. However, in this scale, data were not collected from 5th grade students who were at the primary school level at that time and later included in the secondary school level, and the study group consisted of 150 participants. In addition, as a suggestion in this study, it was stated that studies including advanced analysis could be conducted. Erkuş (2019) states that the measurement of a psychological variable arises from a need. He also states that this need can be based on various reasons such as identifying the missing parts of an existing scale, wondering how a new variable is and testing some hypotheses based on it. Therefore, in this study, it was aimed to develop a self-efficacy scale for all levels of secondary school (5th, 6th, 7th, and 8th-grades) with broad participation that could respond to the need in the field. In this context, the aim of the study is to develop a valid and reliable measurement tool that can measure the self-efficacy of secondary school students (5th, 6th, 7th, and 8th-grade) towards Turkish courses.

Method

Model

This study aims to develop a valid and reliable scale that can measure the self-efficacy of secondary school students towards Turkish courses. Therefore, this study is a scale development study in which the validity and reliability of the "Self-Efficacy Scale for Turkish Lesson (SSTL)" (Appendix 1.) is tested with a quantitative approach.

This research was found ethically appropriate by the decision of Aksaray University Human Research Ethics Committee dated 28.02.2023 and numbered E-34183927-000-00000811288.

Study Group

The study group of the research consists of 420 students selected based on volunteerism among the students studying in the 5th, 6th, 7th, and 8th grades in four different secondary schools in Aksaray province in the second semester (spring semester) of the 2022-2023 academic year. The study group was determined by purposive sampling method in accordance with the voluntary basis. Table 2 shows the descriptive information of the students in the study group.

Table 2

Demographic Information on the Study Group

Class Level	Girl	Boy	N	%
5	54	51	105	25
6	52	53	105	25
7	59	46	105	25
8	56	49	105	25
Total	**221**	**199**	**420**	**100**

Development Process of the Scale

In the development phase of the Self-Efficacy Scale for Turkish Lesson, the studies on the scale development process in the literature were examined and the stages explained in detail below were followed in order by making use of these studies (Başol, 2019; DeVellis, 2017; Erkuş, 2019; Özgüven, 2017).

1. Determination of the Structure to be Measured and the Purpose of Measurement

In scale development, if a good scale is to be obtained, the construct to be measured should be determined well. The first thing to be considered in this process is to determine whether the construct to be measured is general or specific and whether it is different from other constructs (DeVellis, 2017). The construct to be measured in the study is secondary school students' self-efficacy perception towards Turkish courses. In this direction, the study aims to develop a valid and reliable scale that can determine the self-efficacy of secondary school students towards Turkish courses.

2. Creation of the Item Pool

One of the most important steps of the scale preparation process is the creation of the item pool. The items to be included in the scale should be created in accordance with the purpose of the study. In the creation of the item pool, scales in the literature or data to be collected from students through various methods can be utilized. While creating the Self-Efficacy Scale for Turkish Lesson, a group of 25 students were asked to write a text that could reveal students' self-efficacy perceptions towards Turkish lesson. An item pool of 60 positive and negative self-efficacy items was created by utilizing these texts written by the students and self-efficacy scale adaptation (Demir, 2014; Demirkol, 2023; Karatay et al., 2018; Keskin & Atmaca, 2014; Yılmaz Soylu & Akkoyunlu, 2019) and development studies (Akkaya & Çıvğın, 2020; Çarkıt & Altun, 2020; Çocuk et al., 2015; Delican, 2017; Durukan & Maden, 2012; Epçaçan & Demirel, 2011; Güneş et al., 2017; Hasırcı Aksoy et al., 2021; Karadeniz, 2014; Katrancı & Melanlıoğlu, 2013; Kotaman, 2009; Şahin & Öztahtalı, 2019; Ulu, 2018; Ülper et al., 2013) in the literature. While creating these items, attention was paid to reflecting the elements that make up the Turkish courses in order to increase content validity. In addition, it was ensured that the items were in clear, simple and understandable language, that each item was intended to measure a single variable, that there was a single judgment in each item, and that positive and negative expressions were not included in the same item.

3. Determining the Measurement Method

Many ways of responding can be utilized in scale construction. The researcher should decide in advance how the form of measurement will be in his/her research. In fact, this step takes place simultaneously with item construction (DeVellis, 2017). The Self-Efficacy Scale for Turkish Lesson was prepared in accordance with the Likert scale, which is used as the most common item format in scales developed in the field of education. SSTL; The questionnaire was constructed on a 5-point Likert scale as "strongly agree (5)", "agree (4)", "undecided (3)", "disagree (2)", and "strongly disagree (1)".

4. Obtaining Expert Opinion

At this stage of the study, the face and content validity of the items in the item pool were checked.

4.1. Surface Validity

After the item pool of the scale was created, the surface validity of the scale was examined to see whether these items measured the intended information. Face validity is checking the appropriateness of the items in the item pool to the target audience (DeVellis, 2017). In this context, 3 field experts were asked to evaluate the items in terms of their suitability for the purpose of the research. In line with the opinions of the field experts, 4 items were rewritten and 6 items were revised.

4.2. Content Validity

In order to check whether the items in the item pool provided content validity, it was calculated according to the formula found by Lawshe (1975). It is possible to comment on the content validity of the test by looking at the values of the items expected to be included in the scale in line with expert opinions. Content Validity Ratio (CVR) minimum values (content validity criteria) that should have a significance level of = 0.05 according to the number of experts 0.99 for 5, 6, and 7 experts; 0.78 for 8 experts; 0.75 for 9 experts; 0.62 for 10 experts; 0.59 for 12 experts; 0.54 for 13 experts; 0.51 for 14 experts; 0.49 for 15 experts; 0.42 for 20 experts; 0.37 for 25 experts; 0.33 for 30 experts. 59; 0.56 for 12 experts; 0.54 for 13 experts; 0.51 for 14 experts; 0.49 for 15 experts; 0.42 for 20 experts; 0.37 for 25 experts; 0.33 for 30 experts; 0.31 for 35 experts; and 0.29 for 40 or more experts (Veneziano & Hooper, 1997; as cited in Yurdagül, 2005). In this context, the SDR of the items in the draft scale is shown in Table 3.

Table 3

Content Validity Rates of the Scale Item Pool

Item No	KGO	Item No	KGO	Item No	KGO	Item No	KGO
1	0.83	16	0.33	31	0.67	46	0.83
2	0.67	17	0.83	32	0.83	47	0.83
3	0.83	18	0.67	33	1.00	48	1.00
4	0.67	19	1.00	34	0.33	49	0.83
5	0.50	20	0.33	35	0.67	50	0.83
6	0.67	21	0.83	36	0.83	51	0,33
7	0.83	22	1.00	37	0.83	52	0.83
8	1.00	23	0.83	38	1.00	53	0.67
9	1.00	24	0.83	39	0.50	54	1.00
10	1.00	25	0.67	40	0.67	55	0.50
11	0.67	26	1.00	41	0.67	56	0.83
12	0.83	27	0.50	42	0.83	57	1.00
13	1.00	28	1.00	43	0.67	58	1.00
14	1.00	29	0.83	45	0.33	59	0,67
15	0.67	30	0.67	45	0.83	60	0.83
			Total Experts:	12			
			Content Validity Measure (CVM):	.56			
			Total Coverage Validity Ratio (CVR):	.77			

When the CSR values of the items in the scale pool in Table 3 are examined, items 5, 16, 20, 27, 34, 39, 45, 51, 55, which had a low value of 0.62 according to the number of experts, were removed from the draft scale. All of the remaining 51 items had a criterion value greater than 0.62. The total CVR value before the 9 low-valued items in the item pool were discarded was 0.77 and the total CVR value after discarding was 0.83. In this context, it can be said that the content validity of the items in the draft scale and the overall scale is at an acceptable level.

5. Testing of the Item Pool

At this stage, the preliminary and actual applications of the draft scale were realized and the items in the item pool were tested in a way.

5.1. Pre-Trial Application

In order to minimize the situations that may be encountered during the actual application phase, the pre-test phase was applied to a group of 12 students, 3 students from each grade level who meet similar conditions with the group to be applied in one class hour (40 minutes). The pre-test application, can be carried out on 10-15 people representing the range of the relevant variable among the extreme groups from the actual target group to which the scale is considered to be applied (Erkuş, 2019). At this stage, students were asked to indicate any difficulties they would encounter and the items they had difficulty understanding. The researcher took notes of the points that the students had difficulties and did not understand, and after the application, the necessary corrections and additions were made the items in the draft scale.

5.2. Main Application

The main implementation phase was carried out in two stages. Exploratory factor analysis was conducted on the first application data and confirmatory factor analysis was conducted on the second application data.

5.3. Exploratory Factor Analysis

In order to reveal the latent structure that cannot be directly observed in a psychological measurement tool, the structure must be defined correctly. Factor analysis is an analysis that should be applied in scale development studies in psychology in order to test the construct validity of the measured psychological variable and to perform item analysis (Erkuş, 2019). In this context, exploratory factor analysis was conducted to test the item analysis and construct validity of the scale. At this stage, the draft scale was applied to 420 students studying in the 5th, 6th, 7th, and 8th grades of secondary school. The results of the exploratory factor analysis on the collected data are shown in the findings section.

5.4. Confirmatory Factor Analysis

Confirmatory factor analysis can be defined as an analysis that tests whether a predefined and delimited structure is confirmed as a model (Çokluk et al., 2021). In this context, the results of the confirmatory factor analysis performed on the draft scale formed as a result of the exploratory factor analysis in order to test the hypotheses formed on the factor analysis of the scale are given in detail in the findings section.

5.5. Reliability Analysis

In general, reliability is the state of measurement free from errors, in other words, the results of successive measurements are the same or similar to each other (Can, 2020). For the reliability analysis of the scale, Cronbach's Alpha reliability coefficient, which is most commonly used in reliability analysis of Likert-type scales, was used. Criteria values for Cronbach's Alpha reliability coefficients are as follows: 0.90, and above is highly reliable, 0.60-0.90 is highly reliable, 0.40-0.60 is low reliability, and below 0.40 is not reliable (Özdamar, 1999). The results of the Cronbach's Alpha reliability coefficient on the data collected from the students are shown in the findings section.

6. Reporting

In the final stage of scale development, the findings obtained from the validity and reliability studies conducted on the scale were evaluated and interpreted, discussed with the results of similar studies in the relevant literature and reported.

Compliance with Ethical Standard

This research was found ethically appropriate by the decision of Aksaray University Human Research Ethics Committee dated 28.02.2023 and numbered E-34183927-000-00000811288.

Findings

Under this heading, findings and interpretations related to exploratory factor analysis, confirmatory factor analysis and reliability analysis conducted in the analysis part of the scale development process are presented.

1. Findings Related to Exploratory Factor Analysis

Factor analysis is a statistical technique that aims to explain the measurement with as few factors as possible by bringing together variables that measure the same quality or construct (Büyüköztürk, 2016). Factor analysis is a very useful analytical tool that can provide information about important features of many scales that reliability coefficients cannot. It helps to empirically determine how many constructs, latent variables, or factors underlie a group of items that are considered to be included in the scale (DeVellis, 2017). In this context, the Exploratory Factor Analysis (EFA) technique was used in order to prove the construct validity of SSTL.

Factor analysis may not be an appropriate analysis for all data structures obtained as a result of the research. The suitability of the data for factor analysis can be examined with the Kaiser-Meyer-Olkin (KMO) coefficient and Barlett Sphericity Test. The KMO coefficient provides information about the suitability of the data set to be analyzed for factor analysis. For factor analysis, the KMO coefficient is expected to be greater than .60 and Barlett's Test of

Sphericity is expected to be significant (Büyüköztürk, 2016). The KMO coefficient and Barlett Sphericity Test results of the scale data set are shown in Table 4.

Table 4

Content Validity Ratios of Scale Item Pool

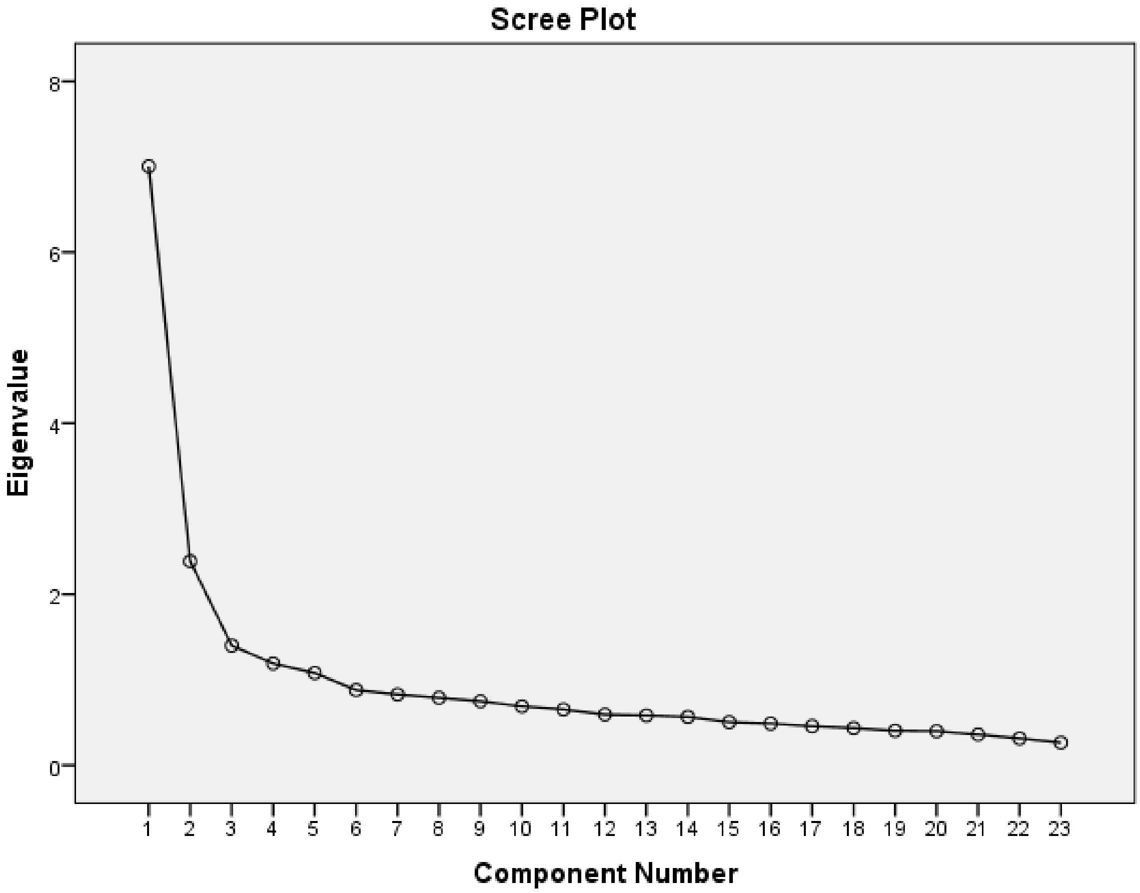
Kaiser-Meyer-Olkin (KMO)		**.907**
Barlett's Test of Sphericity	**Kay-Kare**	3387.429
	sd	253
	p	.000

When the data in Table 4 are analyzed, it is seen that the KMO coefficient value of the scale data set is .907. This value is greater than the criterion value of .60 required for factor analysis. In addition, the Barlett Sphericity Test result of the scale data set was significant (x^2=3387.429; sd=253; p= 0.00). Based on these results, it can be stated that the scale data set is suitable for factor analysis.

In the EFA process of the Self-Efficacy Scale for Turkish Lesson, it was first tried to decide how many factors the scale had. The minimum factor loading values that the items should carry were determined as .40 (Pituch & Stevens, 2016). This value is well above .10 (Büyüköztürk, 2016), which is another critical value stated in the literature. In addition, it was paid attention that the loadings of the overlapping items in different factors should be at least .20 (Howard, 2016) and those items were included under the factor with the highest value. In the 51-item draft scale, items numbered 3-13-14-4-23-11-2-16-34-42-29-30-15-22-12-27-28-21-46-41-25-38-37-24-45-26-20-35 were removed from the scale due to the fact that the factor loadings of some items were lower than .40, some items had a difference of less than .20 between the factor loadings in the closest factor, and some items had one or two items under some factors. The remaining 25 items were grouped under 4 factors. In order to decide the number of factors of the scale, the slope-accumulation graph (scree plot) was analyzed. The scree plot of the Self-Efficacy Scale for Turkish Lesson is shown in Figure 1.

Figure 1

Scree Plot of the Scale



Looking at the slope-accumulation graph in Figure 1, it is understood that the scale has a 4-factor structure. Based on this data, it was decided that the Self-Efficacy Scale for Turkish Lesson should have 4 factors. The variance values explained by these 4 factors are shown in Table 5.

Table 5.

Explained Variance Values of the Scale

Factor	Eigenvalue	Explained Variance (%)	Total Variance (%)
1	3.554	15.450	15.540
2	3.199	13.909	29.359
3	3.045	13.238	42.597
4	2.183	9.491	52.088

When the data in Table 5 are analyzed, it is seen that the eigenvalue of the first factor is 3.554 and the variance explained is 15.540%; the eigenvalue of the second factor is 3.199 and the variance explained is 13.909%; the eigenvalue of the third factor is 3.045 and the variance explained is 13.238%; the eigenvalue of the fourth factor is 2.183 and the variance explained is 9.491%. The total variance explained by these four factors is 52.088%. In scale development studies, the total variance explained in single-factor scales is expected to be 30% and above (Büyüköztürk, 2016). In scale development studies conducted in the field of social sciences, this ratio is expected to be between 40% and 60% (Tavşancıl, 2014). In this context, it can be said that the total variance explained by the Self-Efficacy Scale for Turkish Lesson is at a sufficient level.

After the factor numbers were determined, the factor structures of the items in the Self-Efficacy Scale for Turkish Lesson and the factor values of scale items in Table 6.

Table 6

Factor Values of Scale Items

Draft Scale Item No	Original Scale Item No	Factor 1	Factor 2	Factor 3	Factor 4
40	1	.682			
33	2	.622			
36	3	.617			
39	4	.616			
44	5	.603			
47	6	.563			
31	7	.537			
32	8	.451			
43	9	.466			
10	10		.708		
9	11		.699		
6	12		.694		
5	13		.655		
8	14		.648		
1	15		.560		
50	16			.853	
49	17			.847	
51	18			.794	
48	19			.789	
19	20				.702
18	21				.686
17	22				.625
7	23				.560

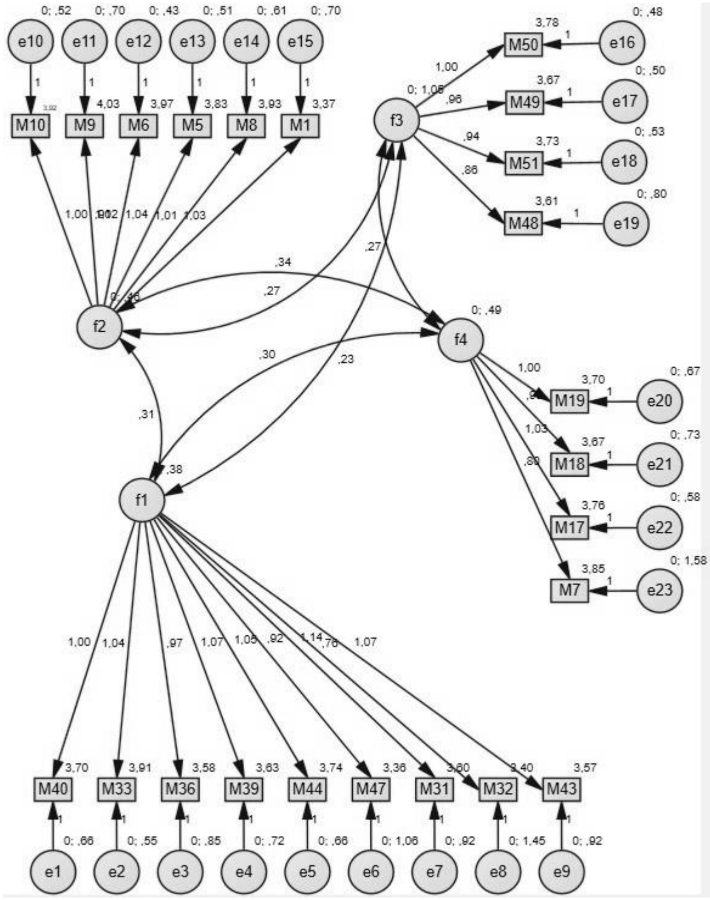
When the data in Table 6 are analyzed, it is seen that the factor values of the items in the Self-Efficacy Scale for Turkish Lesson are between .451 and .853. The fact that the factor values of the items are greater than the criterion value of .40 (Pituch & Stevens, 2016) indicates that they can be included in the scale. The factor values of the items in the first factor vary between .451 and .682, the factor values of the items in the second factor vary between .560 and .708, the factor values of the items in the third factor vary between .789 and .853, and the factor values of the items in the fourth factor vary between .560 and .702. When the 11 items in the first factor were analyzed, it was seen that these items were related to students' feelings of self-confidence in the Turkish lesson and this factor was explained with the expression "Self-Confidence towards the Lesson". When the 6 items in the second factor were analyzed, it was seen that these items were related to students' feelings of taking action in Turkish lessons and this factor was named as "Performing". When the 4 items in the third factor were analyzed, it was seen that these items were related to students' negative feelings towards the Turkish lesson and this factor was expressed as "Negative Readiness". When the 4 items in the fourth factor were analyzed, it was seen that these items were related to students' approaches towards language skills and this factor was explained with the expression "Approach towards Language Skills".

1. Findings Related to Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was conducted to confirm the structural validity of the 4-factor structure that emerged as a result of the EFA analysis of the Self-Efficacy Scale for Turkish Lesson. The factor distributions of the CFA results are presented in Figure 2.

Figure 2

Path Diagram of CFA Results of the Scale



When the path diagram showing the CFA results presented in Figure 2 is examined, it is seen that the explanation ratios of the items to the factors vary between .46 and 1.17, and the error variances vary between .43 and 1.45. The t values for the explanatory status of the latent variables for the observed variables are significant at .05 level if they exceed 1.92 and at .01 level if they exceed 2.56 (Çokluk et al., 2021). Considering the stated criterion values, according to the CFA results of the Self-Efficacy Scale for Turkish Lesson, it was seen that the t value related to the explanatory status of the latent variables to the observed variables was significant at .01 level.

The other results to be considered in CFA results are the fit indices. For the fit indices, the criterion values (x^2 /df= 2.5 ≤ x^2 /df ≤ 5; GFI= 90 ≤ GFI ≤ .95; RMSEA= .05 ≤ RMSEA ≤ .08; AGFI= .85 ≤ AGFI ≤ .90; IFI= .90 ≤ IFI ≤ .95; NFI= .90 ≤ NFI ≤ .95; RMR= .05 ≤ RMR ≤ .08; SRMR= .00 ≤ SRMR ≤ .10; CFI = .90 ≤ CFI ≤ .95; PNFI= .50 ≤ PNFI ≤ 1.00; PGFI=

.50 ≤ PGFI ≤ 1.00) specified in the literature were taken into consideration (Byrne, 2016; Çokluk et al., 2021; Harrington, 2009; Hu & Bentler, 1999; Tabachnick & Fidell, 2013). When the fit indices of the Self-Efficacy Scale for Turkish Lesson were examined according to the CFA results, it was found that there was a significant difference between the expected and observed covariance matrix (x^2=424.805, df=224, p<0.001). When examined in terms of other fit index values, (GFI=.921; RMSEA=.051; AGFI= .902; IFI=.938; NFI=.901; RMR= .062; SRMR= .041; CFI=.937; PNFI=.777; PGFI=.747) it was found that it had acceptable and excellent fit in terms of many criterion values.

2. Findings Related to Reliability Analysis

In order to check the reliability of the Self-Efficacy Scale for Turkish Lesson, Cronbach's Alpha internal consistency coefficient (α), which is the most commonly used reliability calculation in Likert-type scale development studies in the literature, was calculated. A reliability coefficient of .70 or higher calculated for a psychological scale is generally considered sufficient for reliability (Büyüköztürk, 2016). The calculated Cronbach's Alpha internal consistency coefficient (α) of the Self-Efficacy Scale for Turkish Lesson is presented in Table 7.

Table 7

Results of the Reliability Analysis of the Scale

Factors	Cronbach's Alpha (α)
1	.80
2	.83
3	.86
4	.70
Total	.89

When the data in Table 7 are examined, the Cronbach's Alpha internal consistency coefficient (α) of the Self-Efficacy Scale for Turkish Lesson was calculated as .80 for the first factor, .83 for the second factor, .86 for the third factor, .70 for the fourth factor, and .89 for the overall scale. Since these values are above the criterion value of .70 (Büyüköztürk, 2016) accepted in the literature, it shows that the measurements performed are reliable. In this context, it can be said that the internal consistency coefficients of the Self-Efficacy Scale for Turkish Lesson are at a sufficient level.

Discussion and Results

This study was conducted to develop a valid and reliable measurement tool that can measure secondary school students' (5th, 6th, 7th, and 8th grade) self-efficacy toward Turkish courses. In line with the research purpose, the processes specified in the literature (Başol, 2019; DeVellis, 2017; Erkuş, 2019; Özgüven, 2017) were followed in the scale development process.

In the stage of developing the Self-Efficacy Scale for Turkish Lesson, firstly, the literature on the subject was reviewed and various studies (Er, 2019; Gömleksiz et al., 2020; Koç & Arslan, 2017; Maden, 2020; Ocak & Karataş, 2019) on self-efficacy in the literature and scale adaptation (Demir, 2014; Demirkol, 2023; Karatay et al., 2018; Keskin & Atmaca, 2014; Yılmaz Soylu & Akkoyunlu, 2019) and development studies (Akkaya & Çıvğın, 2020; Çarkıt & Altun, 2020; Çocuk et al., 2015; Delican, 2017; Durukan & Maden, 2012; Epçaçan & Demirel, 2011; Güneş et al., 2017; Hasırcı Aksoy et al., 2021; Karadeniz, 2014; Katrancı & Melanlıoğlu, 2013; Kotaman, 2009; Şahin & Öztahtalı, 2019; Ulu, 2018; Ülper et al., 2013) were examined.

An item pool of 60 items was created based on the scale items in the literature and the texts written by the students. In order to determine the surface and content validity of the prepared item pool, it was submitted to the opinion of a group of 12 experts. In line with the expert opinions, 9 items with low content validity were removed from the item pool and a draft scale with 51 items was reached. This draft scale was first applied to 12 students as a pre-application. Necessary corrections and adjustments were made in line with the feedback received from the students, and the final version of the 51-item draft scale was applied to 420 students studying in the 5th, 6th, 7th, and 8th grades of secondary school.

SPSS 22.0 and AMOS 24.0 package analysis programs were used to analyze the data obtained from the students. As a result of the analyses, firstly, the suitability of the data set for factor analysis was checked and it was determined that the KMO coefficient value of the data set was .907 and the Barlett Sphericity Test result was significant (x^2=3387.429; sd=253; p= 0.00) and the relevant factor analyses were performed. As a result of the analyses, a scale of 23 items (19 positive and 4 negative) gathered under 4 factors was obtained. When the items under the determined factors were analyzed, the first factor with 11 items was named " Self-Confidence towards the Lesson "; the second factor with 6 items was named "Performing"; the third factor with 4 items was named "Negative Readiness"; and the fourth factor with 4 items was named "Approach towards Language Skills". The factor loadings of the 23 items on the scale were found to be between 451 and .853. CFA was conducted to confirm the structural validity of the 4-factor structure that emerged as a result of EFA analysis of the Self-Efficacy Scale for Turkish Lesson. According to the CFA results of the Self-Efficacy Scale for Turkish Lesson, when the fit indices were examined, it was determined that there was a significant difference between the expected and observed covariance matrix; when examined in terms of other fit index values, it was determined that it had acceptable and excellent fit in terms of many criterion values.

In order to check the reliability of the Self-Efficacy Scale for the Turkish Lesson, Cronbach's Alpha internal consistency coefficient (α), which is the most commonly used reliability calculation in Likert-type scale development studies in the literature, was calculated. Cronbach's Alpha internal consistency coefficient (α) was calculated as .80 for the first factor, .83 for the second factor, .86 for the third factor, .70 for the fourth factor, and .89 for the overall scale. Based on these values, it can be said that the Self-Efficacy Scale for Turkish Lesson is a reliable measurement tool for measuring secondary school students' self-efficacy towards Turkish lesson.

The 4-factor and 23-item Self-Efficacy Scale for Turkish Lesson, which was obtained as a result of the study, was prepared in 5-point Likert format as "completely agree (5)", "agree (4)", "undecided (3)", "disagree (2)" and "strongly disagree (1)". Of the 23 items on the scale, 19 are positive and 4 are negative. The 4 items in the third factor of the scale constitute the items that should be reverse coded. The lowest score that can be obtained from the scale is 23 and the highest score is 115. High scores on the scale indicate that secondary school students have high levels of self-efficacy towards Turkish lesson, while low scores indicate that secondary school students have low levels of self-efficacy towards Turkish lesson.

In the literature, there is a 5-factor 40-item scale developed by Durukan & Maden (2012) to determine the self-efficacy of 6th, 7th and 8th grade secondary school students towards Turkish lesson. Due to the different Turkish education system in the years when the scale was developed, 5th grade students were not included in the study group since 5th grades were not accepted as secondary school; CFA, which was also stated as a recommendation in the related study, was not conducted in the study, and due to the changing student profile and innovations in the literature in this field, a valid and reliable scale that can determine the self-efficacy of secondary school 5th, 6th, 7th, and 8th grade students towards Turkish lesson was developed. The Self-Efficacy Scale for Turkish Lesson differs from the related study in these aspects. When all the findings of the study are considered together, it can be said that the Self-Efficacy

Scale for Turkish Lesson (Appendix 1.) is a valid and reliable scale for determining the self-efficacy of secondary school students towards Turkish lesson.

Recommendations

This scale developed as a result of the study can be used to determine the self-efficacy of 5th, 6th, 7th, and 8th grade students towards Turkish lesson. In the scales to be prepared to determine the self-efficacy of secondary school students towards Turkish lesson, scale development studies with wider participation from across Turkey can be conducted.

Compliance with Ethical Standard

This research was found ethically appropriate by the decision of Aksaray University Human Research Ethics Committee dated 28.02.2023 and numbered E-34183927-000-00000811288.

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Appendix 1

Self-Efficacy Scale for Turkish Lesson

Factor Name	Item No	Scale Items
Self-Confidence towards the Lesson	1	I can recognize wrong information in Turkish lessons.
	2	I can answer the questions asked by my teacher in Turkish lessons.
	3	I can associate the new information I learn in Turkish lessons with my old knowledge.
	4	I can question the accuracy of the information I have learned in Turkish lessons.
	5	I can develop solutions to solve the problems we encounter in Turkish lessons.
	6	I can give feedback about Turkish lessons.
	7	I can support my friends who have difficulty understanding the topics in Turkish lessons.
	8	I can easily criticize my friends' behaviors in Turkish lessons.
	9	I can apply the knowledge, methods and techniques I have learned in other courses in Turkish lessons.
Performing	10	I can participate regularly in Turkish lesson activities.
	11	I can adapt to my class in Turkish lessons.
	12	I can focus on Turkish lessons.
	13	I can actively participate in Turkish lessons.
	14	I can do Turkish homework without difficulty.
	15	I am one of the most hardworking students in my Turkish class.
Negative Readiness	16	I have problems doing the activities in Turkish lessons.
	17	I have difficulty understanding Turkish lessons.
	18	I cannot easily answer the questions in Turkish lessons.
	19	I do not have enough information about Turkish lessons.
Approach towards Language Skills	20	I can use speaking methods/techniques and strategies (critical speaking, discussion, persuasion, guided speaking, creative speaking, etc.) in Turkish lessons.
	21	I can use reading methods/techniques and strategies (reading aloud, silent reading, skim reading, critical reading, etc.) in Turkish lessons.
	22	I can use listening methods/techniques and strategies (participant-participant listening, critical listening, etc.) in Turkish lessons.
	23	I can use writing methods/techniques and strategies (note taking, summarizing, free writing, guided writing, creative writing, etc.) in Turkish lessons.

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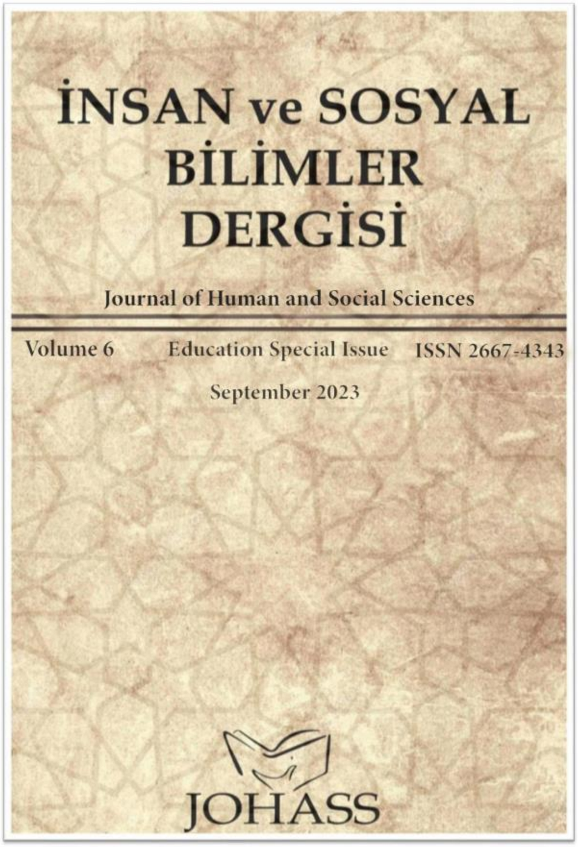

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Analyzing University Entrance Exam Physics Questions using Physics Problems Taxonomy for Cognitive Processes

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Analyzing University Entrance Exam Physics Questions using Physics Problems Taxonomy for Cognitive Processes

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Abstract **Research Article**

University students often find physics challenging due to physical and mathematical obstacles, poor mathematical skills, and inadequate problem-solving abilities. This perception affects their interest and performance in the subject. High school students also struggle with numerical problems and understand curricular topics that lack concrete examples and require mathematical manipulations or visualization. Analyzing physics problems is crucial for guiding curriculum development, contributing to physics education, identifying students' difficulties in understanding and solving problems, and improving the process of physics education at all educational levels. Taxonomies are hierarchical frameworks used in education to classify educational learning goals or objectives according to their complexity. Bloom's Taxonomy, Anderson and Krathwohl's revised taxonomy, Lee Shulman's learning grid, Marzano's New Taxonomy of Educational Objectives (NTEO), and the Taxonomy of Introductory Physics Problems (TIPP) are all essential tools for understanding and improving educational learning outcomes. The study adapted the TIPP taxonomy into Turkish and analyzed 7 physics questions in the 2023 BPT. Results showed 3 questions were at recall, 1 at comprehension, and 3 at analysis, with no question at using knowledge. The study demonstrates that TIPP is a useful taxonomy for teachers to plan, apply, and evaluate knowledge and algorithms in solving physics problems, identifying students' needs. This taxonomy allows educators to create questions that engage students at all cognitive levels, promoting cognitive engagement. Researchers can analyze physics questions in the TYT and AYT in earlier years.

Keywords: Physics problems, basic proficiency test, taxonomy, cognitive processes

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Introduction

University students perceive physics as a difficult course and face a number of obstacles while studying this course (Adianto & Rusli, 2021; Örnek, Robinson, & Haugan, 2007; Snetinova & Koupilova, 2021, Süzük, Çorlu, & Gürel, 2011). Physical challenges include understanding queries and identifying applicable equations, while mathematical challenges include placing data into equations and performing mathematical operations (Balta et al., 2019). Students' lack of understanding of physics concepts, poor mathematical skills, and inadequate problem-solving abilities contribute to these difficulties (Djudin, 2018). Furthermore, students' negative attitudes towards physics and the perception that physics is the most difficult science subject also affect their interest in and performance in physics (Ibrahim, Zakiang, & Damio, 2021). Emotional problems and inadequate preparation are also important factors affecting students' views towards physics (Bray & Williams, 2020). (Harikrishnaprabu & Annapooranam, 2019) Difficulties in solving numerical problems in physics arise from students' inability to define the relevant concepts and recognize the questions asked. Students also have difficulty in understanding the problem and planning a solution (Sartika & Humairah, 2019).

High school students also perceive physics as a difficult subject (Adianto & Rusli, 2021). These difficulties can be classified into several categories. Physical difficulties include difficulties in understanding queries and identifying valid equations (Adianto & Rusli, 2021). Mathematical difficulties consist of problems in substituting data into equations and performing mathematical operations (Balta et al., 2019). Students' inability to solve non-intuitive problems can be attributed to a superficial understanding of problem statements (Mumthas & Abdulla, 2019). In addition, students tend to perform poorly in mathematical problem solving in physics, especially in creating or defining formulas, extracting information from diagrams, applying physics concepts to create schematic diagrams, and applying mathematics to solve physics problems (Harikrishnaprabu & Annapooranam, 2019). In addition, students often struggle to identify relevant concepts and recognize the questions asked in numerical problems (Yuliati & Parno, 2018). Furthermore, students have difficulty identifying coordinate axes, depicting free-body diagrams, representing forces, and determining resultant forces and direction of motion (Supeno, Subiki, & Rohma, 2018). Moreover, students struggle to understand curricular topics that lack concrete examples and require mathematical manipulations or visualization (Reddy & Panacharoensawad, 2017). In addition, they find it difficult to solve problems independently and ask questions in class (Erinosho, 2013). Students think that the most challenging aspect of physics is the course material, followed by their own abilities and instructors (Ekici, 2016). High school physics education often focuses on fragmented and repetitive exercises, leading to incomplete and non-retained understanding of the subject matter (Antonowiski, Alencar, & Rocha, 2017). In general, students struggle to understand physics concepts, apply mathematical skills, and develop problem-solving skills, contributing to the perception that physics is a difficult subject.

The analysis of physics problems is crucial for several reasons. First, understanding the cognitive processes required to solve these problems can guide curriculum development and the construction of assessments (Adianto & Rusli, 2018). Second, analyzing physics problems contributes to the field of physics education by enabling researchers to examine the relationship between cognitive processes and problem solving (Teodorescu et al., 2013). Moreover, by analyzing physics problems, students' difficulties in understanding and solving problems can be identified, which enables the development of effective learning models and strategies (Braun, 1984). On the other hand, it also improves the process of physics education at all educational levels, including primary, secondary and higher education (Burbano, 2013). It enables identifying and analyzing the needs of students and learners in solving problems and tasks in physics (Hanáková & Kluvanec, 2016). In addition, analyzing physics problems helps to develop problem-solving skills that are essential for physicists in the workplace (Ling, Moebs, & Sanny, 2016). In addition, it enables students to acquire problem solving skills in physics, which is crucial for their physics education (Koupilová, Mandková, & Sntinová, 2017). Finally, analyzing physics problems helps to identify the difficulties that students face when completing tasks and enables the discovery of strategies and methods that can help students solve problems correctly (Snetinova & Koupilova, 2012). Analyzing physics problems is crucial for developing problem solving skills (Teodorescu et al., 2013). Curriculum design for introductory physics courses can be guided by an understanding of the specific skills needed to solve physics problems (Adams & Wieman, 2007). Moreover, analyzing physics problem solving skills can help researchers to determine the extent to which various cognitive processes are used during problem solving and the relationship between these processes (Ariani, 2020). By analyzing problems, students can grasp concepts and learn how to apply them effectively (Masitoh et al., 2021). This knowledge enables students to plan and implement problem-solving strategies (Nehru, Kurniawan, & Riantoni, 2020). Through analysis, students can recognize the difficulties they face in understanding problems and developing solutions (Adams & Wieman, 2015). It also identifies incomplete applications of concepts that can hinder problem-solving skills (Yuliati & Parno, 2018).

A taxonomy can be used to analyze and classify physics problems according to the level of knowledge and understanding required for a correct answer (Buick, 2011). In solving physics problems, it is crucial to classify problems according to their underlying principles rather than their context (Mason & Singh, 2016). This strategy can encourage a more in-depth approach to students' learning and lead to higher levels of achievement (Mason & Singh, 2016). By comparing the categorization of problems according to solution similarity, students can learn to recognize the fundamental similarity between problems with different contexts but with the same underlying physics principles (Adams & Wieman, 2015). In addition, the identification of different sub-skills that affect problem solving skills in various contexts supports the use of taxonomies in teaching and assessing problem solving in physics education (Buick, 2011; Mason et al., 2016; Adams et al., 2015). These taxonomies establish a relationship between physics problems, the type of physics knowledge they require, and the cognitive processes they promote in students (Teodorescu, Bennhold, & Feldman, 2008). Taxonomies facilitate the classification of problems by categorizing physics questions according to the level of knowledge and understanding required for a successful response (Buick, 2011). Moreover, the ability to categorize problems based on underlying principles as opposed to contexts is considered a hallmark of problem-solving expertise in physics (Mason & Singh, 2016). Using taxonomies to analyze physics problems can help students recognize the fundamental similarity between problems with different contexts but the same physics principles (Adams & Wieman, 2015).

What is a Taxonomy? What are Txonomies in Education?

In education, a taxonomy is a hierarchical framework used to classify educational learning goals or objectives according to their complexity. Globally, numerous taxonomies have been developed and implemented in educational institutions. The purpose of these taxonomies is to provide a system for classifying students' cognitive abilities and skills in the teaching, learning and assessment processes. Bloom's taxonomy, Anderson's taxonomy, SOLO taxonomy, Shulman's learning grid and Marzano's taxonomy are well-known taxonomies in education (Aripin et al., 2020; Irvine, 2021). These taxonomies differ from each other in the way they address knowledge, cognition, metacognition, higher order thinking skills, affect and underlying learning theories. These taxonomies have had a significant impact on higher education and are used to inform teaching decisions and to understand the potential consequences of educational decisions (Pathak & Palvia, 2021; Rigney & Zhao, 2022). Taxonomies have also been developed for specific domains, such as virtual and augmented reality applications in education, to categorize and clarify communication between researchers, developers and educators (Motejlek & Alpay, 2021).

Bloom's Taxonomy was first published in 1956 and has since been widely used in UK Higher Education (HE). The taxonomy classifies educational objectives into six levels: knowledge, comprehension, application, analysis and synthesis (Newton, Da Silva, & Peters, 2020). Bloom's taxonomy is a popular educational model used to categorize learning objectives into various levels. It consists of cognitive, affective and psychomotor domains. Cognitive domain levels include knowledge, comprehension, application, analysis, synthesis, and evaluation (Velázquez-Iturbide, 2021). It helps to define teaching and learning objectives, learning strategies and assessment. It is a powerful tool that helps educators analyze assessment items and can be used to categorize assessment questions (Laddha et al., 2021). Bloom's taxonomy is used by educational institutions to design course learning outcomes (CLOs) and match assessment items to them in order to improve student learning (Shaikh, Daudpott & Imran, 2021). However, difficulties in using the taxonomy have been reported and some authors have suggested that there are inherent flaws in the classification system (Sahu et al., 2021). To address this issue, researchers have proposed deep learning models such as LSTM-based models to more accurately classify CLOs and assessment items into Bloom's levels (Waheed et al., 2021). In addition, Bloom's taxonomy was used to analyze and improve the comprehension skills of the pre-trained language models, resulting in improved performance on question answering tasks (Sahu et al., 2021).

The taxonomy developed by Anderson and Krathwohl is a revised version of Bloom's Taxonomy. The revised taxonomy classifies thinking skills at six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation (Arlianty et al., 2018). Bloom's (1956) first taxonomy classified thinking skills as lower-order thinking skills (LLSS) and higher-order thinking skills (HLSS) (Tee et al., 2010). Lower order thinking skills (LLSS) and higher order thinking skills (HLSS) are distinguished from each other by the cognitive process dimension. HOTS include analyzing, evaluating and creating, while LOTS include remembering, comprehending and applying. The knowledge dimension focuses on the types and variety of mental activities required to complete a task ((Urgo, Arguello, & Capra, 2019), (Arlianty et al., 2018)). Anderson and Krathwohl's (2001) revised taxonomy made significant changes to the original taxonomy, including the addition of the synthesis level and the reordering of the levels. In addition, the revised taxonomy includes commonly used action verbs to assess each level of thinking skills. Overall, Anderson and Krathwohl's taxonomy extends Bloom's Taxonomy and provides a more comprehensive framework for categorizing and assessing thinking skills in education (Arlianty et al., 2018; Tee et al., 2010).

Anderson and Krathwohl's taxonomy is used in education to analyze and classify reasoning skills in various subjects and learning levels. It provides a framework for understanding and assessing students' cognitive abilities. In the papers presented, Anderson and Krathwohl's taxonomy was used in various ways. In the study by Ariffin et al. (2020), the taxonomy was used to analyze the paradigm of thinking skills used in arithmetic education during the British colonial period. Motejlek and Alpay (2021) used the taxonomy to create a taxonomy of virtual reality and augmented reality applications in education. Arlianty et al. (2018) use the taxonomy to identify students' capacity to answer questions according to their cognitive level. Sahu et al. (2021) use the taxonomy to improve the question answering comprehension capabilities of pre-trained language models. Overall, Anderson and Krathwohl's taxonomy is a useful tool for understanding and improving educational learning outcomes.

Biggs and Collis developed the SOLO taxonomy in 1982 (Ladias, Ladias, & Karvounidis, 2019). This taxonomy is a framework for mapping students' levels of understanding and is used to improve student learning (Graf, 2021). The taxonomy aims to move from the concrete to the abstract and to achieve greater complexity of reasoning (Hook, 2018). It allows students to articulate learning outcomes, understand the learning process and set new learning goals over time (Castro & Fisler, 2017). Education, cognitive psychology and curriculum design were influential in the development of the SOLO taxonomy (Baxter & Durrant, 2017). It includes five levels of achievement: pre-structural, structural, multi-structural, relational, and extended abstract (Li & Goos, 2013). The taxonomy is used to assess students' understanding and knowledge in various disciplines, including correlation graphing (Vrettaros, Vouros, & Drigas, 2007). The assessment tool derived from the SOLO taxonomy is used to identify which aspects of correlation graphing students struggle with and need additional instruction. The SOLO taxonomy is also used to assess knowledge and learning outcomes in visual programming environments such as Scratch. It enables educators to assess the request detection maturity of a student's code and their understanding of tracing requests between processes in a programming environment. In addition, the modeling of diagnostic systems using fuzzy logic is examined, in particular the SOLO taxonomy system, which can be used in numerous diagnostic science disciplines. The intelligent system developed based on this modeling can improve the extraction of results in e-learning and remote diagnostic systems and facilitate the use of diagnostic systems in education (Ladias, Ladias, & Karvounidis, 2019; Li & Goos, 2013; Vrettaros, Vouros, & Drigas, 2007). In education, the SOLO taxonomy is used to assess students' cognitive abilities and improve their understanding of complex concepts. It aims to classify educational learning goals or objectives according to their level of complexity. The taxonomy has been used to assess students' ability to develop algorithm runtime complexity and to improve the engineering education teaching process (Patterson, 2021). It has also been compared and contrasted with other taxonomies commonly used in education such as Bloom's taxonomy and Webb's depth of knowledge to understand its treatment of knowledge, cognition, metacognition, and higher-order thinking skills (Aronshtam, Shrot, & Shmallo, 2021). Using the SOLO taxonomy in teaching can improve student activity, resource selection, conceptual understanding, and the growth of students' cognitive activities (Kaharuddin & Hajeniati, 2020). It can result in better understanding and learning, leading to improved student performance (Ladias, Ladias, & Karvounidis, 2019).

Lee Shulman created the learning grid in 2002 as a tool for interdisciplinary reflection on student learning (Mortier & Yatczak, 2016). In education, Shulman's learning grid is used to understand student learning across disciplines. It provides a visual representation of how students learn in specific courses or programs. The chart is used in interdisciplinary dialogues related to the Science of Teaching and Learning (SoTL) (Mortier & Yatczak, 2016). In the higher education context, the grid has been used to assess and guide students' learning progress in blended teaching methods that combine face-to-face instruction with the use of a Learning Management System (LMS) (Lai & Sanusi, 2013).

The taxonomy created by Marzano in 1998 (Irvine, 2017) is used in education to promote higher-order thinking skills and meaningful, transferable learning (Irvine, 2020; Insani, Pratiwa, & Muhardjito, 2019; Irvine, 2020). The ego provides a framework for the integration of metacognitive and cognitive systems (Dubas & Toledo, 2016). The Marzano taxonomy assists instructors in course design, establishing student learning outcomes, conducting assessments, and providing targeted feedback (Toledo & Dubas, 2016; Irvine, 2021). It is often combined with other models such as problem-based learning and integrated learning to increase the effectiveness of instructional strategies (Asmi, Wonorohardjo, & Widarti, 2019). The aim of Marzano's taxonomy is to move students from concrete to abstract thinking and increase the complexity of their reasoning (Graf, 2021). Furthermore, Marzano's taxonomy is used to design and categorize virtual and augmented reality applications in educational settings, thus facilitating communication between researchers, developers, and educators (Finelli & Rasoulifar, 2014). Taxonomy is also used in interdisciplinary teaching approaches for engineering design education where it helps to map design thinking and improve students' performance in design tasks (Motejlek & Alpay, 2021). In addition, Marzano's taxonomy has been compared to other well-known taxonomies in education, with a focus on addressing knowledge, cognition, metacognition, higher order thinking skills, affect, and learning theories (Irvine, 2020; Insani, Pratiwi, & Muhardjito, 2019; Dubas & Toledo, 2016; Toledo & Dubas, 2016).

In education, Marzano's New Taxonomy of Educational Objectives (NTEO), created in 2006 (Marzano & Kendall, 2006), is used to categorize and assess students' achievements in various knowledge domains. It distinguishes between content and process or lifelong knowledge, which in turn is subdivided into complex thinking, data processing, communication, group collaboration and the development of habits of mind (Cotič, Felda, & Žakelj, 2020). Marzano's taxonomy is used to explicitly teach higher-order thinking skills and promote psychomotor learning through activities such as apprenticeships, internships and school practicums (Rigney & Zhao, 2022). It provides a framework for setting instructional goals, organizing instructional content and activities, and assessing instructional outcomes (Marzano & Kendall, 2006). Taxonomy has been a mainstay in formulating goals and best practices in higher education for decades (Krau, 2011). Marzano's New Taxonomy, which includes different goals and tasks for retrieval, comprehension, analysis, knowledge application, metacognition and self-system (Marzano & Kendall, 2008), is also used as a scale to measure student performance. Aheisibwe, Kobusigye, and Tafadzwa (2002). NTEO is a two-dimensional architecture consisting of three reasoning systems and three knowledge domains. The actions of these systems are determined by the learner's procedural knowledge. The six levels are the self system, metacognitive system, information use, analysis, comprehension and retrieval. Self-system beliefs, attitudes and expectations determine motivation for a new task. Level 5 of the metacognitive system mobilizes the system by defining goals and developing strategies to achieve them. The cognitive system (levels 1-4) is responsible for the effective processing of information (Teodorescu et al., 2013).

According to the related literature, university students generally find physics challenging due to physical and mathematical difficulties. These difficulties are exacerbated by a lack of understanding of physics concepts and poor mathematical and problem-solving skills. Emotional issues and lack of preparation also contribute to students' perspectives on physics. Taxonomic analysis of physics problems seems important for several reasons, including guiding curriculum design, allowing researchers to study the relationship between cognitive processes and problem solving, developing problem solving skills for physicists, and helping students identify difficulties and explore strategies. Furthermore, taxonomic analysis can be used to categorize problems based on knowledge and understanding, which will promote a deeper approach to student learning and higher levels of achievement. In this context, the aim of this study is to analyze the physics questions asked in the Higher Education Institutions Exams Basic Proficiency Test (BPT) with the Physics Problems Cognitive Processes Taxonomy.

Method

Model

In this study, document analysis technique, one of the qualitative research methods, was used. Document analysis involves analyzing written items that contain information for the data targeted for study (Yıldırım & Şimşek, 2013). Document analysis is the process of analyzing the data obtained in a systematic way by reviewing and evaluating electronic and printed materials (Bowen, 2009).

Sample and Population

The sample of the study consists of 7 physics questions in Higher Education Institutions Exams BPT in 2023.

Collection of Data and Analysis

The data were obtained from the Student Selection and Placement Centre (OSYM)'s website (OSYM, 2023a) and analyzed according to the Physics Problems Cognitive Processes Taxonomy adapted from Teodorescu et al.'s (2013) study. The classification of the Basic Proficiency test questions according to the Physics Problems Cognitive Processes Taxonomy was done separately by the researcher and 2 experts. It was seen that the analysis made by the researcher and 2 experts agreed 85.71%. The 3 questions that did not agree were re-decided according to the joint analysis. The Physics Problems Cognitive Processes Taxonomy used for the analysis is explained in detail below.

Taxonomy for Evaluating Physics Problems

Teodorescu et al. (2013) created Taxonomy of Introductory Physics Problems (TIPP) using NTEO. TIPP is an implementation of NTEO that classifies physics problems according to the cognitive processes and knowledge involved. Knowledge domains and cognitive processes are shared by both taxonomies, with the exception of TIPP's emphasis on overcoming obstacles.

There are several differences between TIPP and NTEO. While TIPP is a database of physics problems that provides descriptions and examples of problems involving cognitive processes, NTEO is a framework for creating educational goals, assessments and curriculum design for any subject. Second, while NTEO provides general descriptions of reasoning processes and examples from various disciplines, TIPP extends these descriptions to physics and includes only physics-related problems as examples. While NTEO organizes cognitive processes, TIPP organizes physics-related topics. Finally, while NTEO can be applied in all academic disciplines, TIPP is specific to physics education (Teodorescu et al., 2013).

The TIPP classification of physics problems assumes minimal exposure to certain knowledge, mental processes and cognitive abilities. Students often engage in different processes than those who have never encountered the problem. The focus is on basic processes such as sequencing the tasks required by the problem. Despite the adoption of NTEO's hierarchical process organization, additional research on student behavior is needed to verify the relationship between the cognitive processes activated during physics problem solving. The type of knowledge, including information and mental processes, and the cognitive complexity required to solve the problem are used to classify problems (Teodorescu et al., 2013).

The validity of the TIPP was assessed in three phases with the participation of instructor feedback, problem creators and physics education researchers. Comments focused on the classification algorithm, the definitions presented and the examples given. Participants were asked to answer questions about the algorithm, levels, definitions, necessity, examples and classification of introductory physics problems. Each participant received the taxonomy and had up to three months to evaluate the queries. Without exception, all answered "yes" to every question and found the levels indispensable. A senior researcher in physics education confirmed that students engage in cognitive processes when solving problems. To determine the reliability of the TIPP, Cohen's Kappa coefficient inter-rater reliability agreement coefficient was calculated. Test-retest reliability was determined by calculating Cohen's Kappa coefficient for each rater at two independent times (June 2008 and April 2009). These coefficient values indicate that there is a high level of agreement between raters and that the taxonomy is reliable (Teodorescu et al., 2013).

The Taxonomy of Introductory Physics Problems (TIPP) is a framework for classifying physics problems according to the cognitive processes required to solve them. It consists of levels, sublevels, categories and subcategories based on the taxonomy of educational objectives. TIPP targets physics problem solving knowledge as defined by the Physics Education Research (PER) and uses the cognitive processes defined by PER. It can be extended to metacognitive aspects that monitor, investigate and evaluate thought processes during problem solving activities. TIPP is a theoretical framework with numerous practical applications, compatible with all kinds of teaching approaches. In the past, textbook publishers have categorized physics topics according to their logic, but not according to the complexity of knowledge, mental procedures and cognition required to solve a given problem. TIPP can help textbook authors and developers to replace the vague "easy-medium-hard" distinction for end-of-chapter problems with a more precise representation of the knowledge, mental procedures and cognition required to solve a given problem (Teodorescu et al., 2013).

This taxonomy can be used to assess students' problem solving skills in physics or their cognitive development in specific domains targeted by TIPP. Future research will focus on validation based on students' performance on various problem categories, discussions prompted by the problems, and correlations between problem scores and students' scores on conceptual understanding assessments, attitude assessments, and exams. TIPP also plans to extend the taxonomy to include metacognitive aspects of student thinking, the role of intuition, attitudes, dispositions and epistemological beliefs. TIPP is a theoretical construct with practical applications in solving physics problems. Teodorescu et al. (2013) state that this construct can be used in designing educational objectives and assessing the cognitive processes of students solving physics problems.

Cognitive Processes and their Effects on Physics Knowledge and Mental Procedures

This section describes cognitive processes and their effects on physics knowledge and mental procedures, adapted from the work of Teodorescu et al (2013).

Level 1. Undoing

1-a Recall and recognition: Recalling basic physics knowledge about a problem without having to understand its structure.

Recall and recognition of physics knowledge: The student should be able to identify, list, name, recognize and write physical quantities, units, basic equations, formulas, physics terminology, concepts, symbols and phenomena. They should also be able to express general physical laws and principles, write their corresponding equations and recognize their real-world applications. The purpose of non-mathematical physics problems involving recall or recognition of knowledge is to test students' background knowledge of physics. These problems should not be complex, requiring students to recall the content of the laws and definitions of physics without requiring them to perform calculations.

1-b Execution: Performing a problem-solving procedure without making a significant error but not understanding how it works.

Carrying out physical mental procedures: The learner can calculate various physical quantities, derive their results, draw free-body diagrams, graph and plot physical quantities and solve equations related to physics.

Level 2. Understanding

2-a Integration: Defining the knowledge structure of physics and distinguishing critical problem features from non-critical ones.

Integrating physics knowledge: The learner can identify, separate, extract and select relevant physics knowledge such as domain availability, results and generalizability.

Integration of physics mental procedures: Students can mentally process separating necessary items from non-essential ones, creating and planning problem-solving strategies, and identifying and demonstrating mental procedure steps.

2-b Symbolization: Representing knowledge or mental process to solve physics problems correctly.

Symbolizing physics knowledge: Physical quantities, basic equations, formulas, vocabulary terms, concepts, symbols and phenomena can be represented visually, verbally, mathematically or graphically by the student.

Symbolizing physics mental procedures: The learner can represent, illustrate and map the conceptual procedures involved in solving a problem.

Level 3. Analysis

3-a Matching: Identifying similarities, differences and relationships between the components of a physics problem.

Matching physics knowledge: The learner can compare, organize, distinguish, match, order and reorder the magnitudes of physical quantities, physical phenomena, equations and related expressions, as well as identify similarities and differences. They can also organize, classify and group specific details into meaningful categories and identify similarities and differences between one generalization or principle and other generalizations or principles.

Matching physics mental processes: The learner can compare, organize, differentiate, differentiate, distinguish, match, order, sort, sequence and reorder mental processes. The student can identify similarities and/or differences between two mental processes.

3-b Classification: Organizing physics knowledge into higher and lower categories for problem solving.

Categorizing physics knowledge: The learner can identify, determine, demonstrate and assign lower and higher categories for specific knowledge, including identifying the higher category of a physics principle and inferring its applications and implications.

To be able to classify mental procedures in physics: The learner will be able to define, discuss, evaluate, explain, discuss, evaluate, explain and determine the degree of generality of higher and lower mental procedures in physics problems.

3-c Analyzing errors: Analyzing the logic, reasonableness and accuracy of physics knowledge.

Analyzing errors in knowledge of physics: The learner can identify, demonstrate, discuss, evaluate, check, discuss, explain, illustrate, exemplify and assess the reasonableness of knowledge of specific details, generalizations and principles.

Analyze errors related to physical mental procedures: The learner can recognize errors made during the mental execution of a procedure.

3-d Generalization: Using existing physics knowledge to establish new generalizations or principles.

Generalizing physics knowledge: Students can construct and defend generalizations and principles based on given details, and when exposed to these principles, they can construct them in a more general way.

Generalizing physical mental processes: The student can formulate and defend generalizations about mental processes.

3-e Determination: Using knowledge of physics, discovering new applications and logical consequences.

Identifying physics knowledge: This category of problems requires students to develop generalizations about mental processes that are not widely available in textbooks or PER literature. They can recognize properties that may or may not hold under certain conditions and predict what can or should occur under those conditions.

Identify mental processes in physics: The learner can make inferences about mental processes and their consequences under certain conditions and detail how the use of a particular process helps them make predictions.

Level 4. Knowledge Utilization

4-a Decision-making: Choosing between two or more alternatives.

Decision-making: The learner can make decisions about details, generalizations and principles.

Decision-making about physics mental procedures: The learner makes decisions about mental procedures based on his/her mental procedure abilities and knowledge.

4-b Overcoming obstacles (problem solving): Completing a goal or initiative despite obstacles or limiting circumstances.

Overcoming obstacles related to knowledge of physics: The student solves problems involving lower-order cognitive processes by using knowledge to overcome obstacles presented in the problem, overcoming constraints and developing problem-solving skills.

Overcoming obstacles related to physics mental procedures: The learner overcomes an obstacle using knowledge of a mental procedure.

4-c Experimentation: Generating and testing hypotheses to understand phenomena based on the rules of evidence of statistical hypothesis testing.

Experimentation related to knowledge of physics: Students generate and test hypotheses about physics and make predictions based on known or assumed principles. Design tests and evaluate the validity of principles based on test results.

Conducting experiments related to physics mental procedures: Using knowledge of mental procedures related to physics, the learner generates and tests hypotheses related to mental procedures.

4-d Research: Developing and testing hypotheses about past, present and future events using logical and well-structured arguments as evidence.

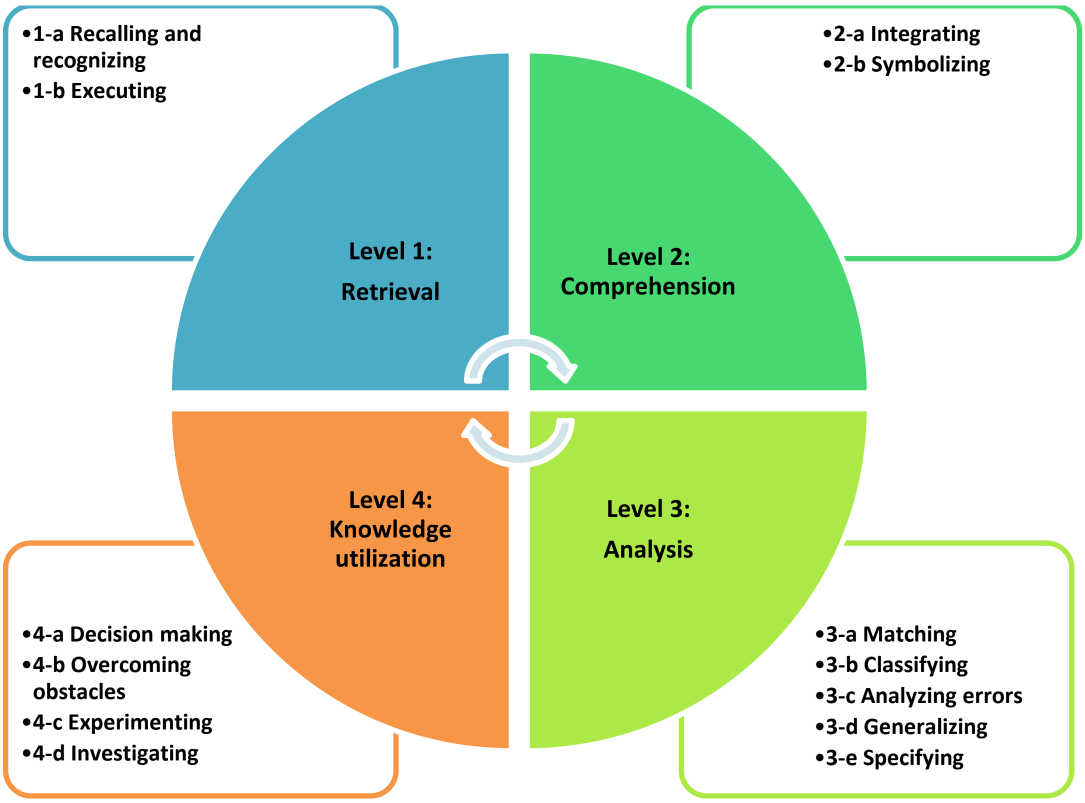
Investigate physics information: The learner uses information literacy to investigate past, present or future events or to conduct information-related research.

Investigate mental procedures related to physics: The learner uses their knowledge of mental procedures to investigate past, present or future events or to investigate mental procedures.

Figure 1 below shows the taxonomy of cognitive processes in physics problems.

Figure 1

Taxonomy of Cognitive Processes in Physics Problems



Findings

Analysis of BPT Physics Questions according to the Taxonomy of Cognitive Processes

In this section, the results of the analysis of the physics questions in the 2023 Higher Education Institutions Exams, Basic Proficiency Test (BPT) for the application of the Physics Questions Cognitive Processes Taxonomy (PS-PST) will be presented.

In BPT, there are 7 questions in Physics from 9th and 10th grade subjects. Table 1 shows the subject distribution of physics questions asked in 2023-BPT according to grade levels.

Table 1

Distribution of 2023 BPT Physics Questions by Grade Level

Subject's Title	Grade Level	Question Number
Introduction to Physics	9	-
Matter and Properties	9	Question 1
Motion and Force	9	Question 2
Work, Power and Energy	9	Question 3
Heat, Temperature and Expansion	9	Question 4
Electrostatics	9	-
Grade 9 Total Number of Questions		**4**
Electric Current and Circuits	10	Question 5
Magnets and Magnetism	10	-
Pressure	10	-
Lifting Force	10	-
Introduction to Waves and Spring Waves	10	-
Water, Sound and Earthquake Waves	10	-
Enlightenment	10	Question 6
Shadow, Plane Mirrors and Spherical Mirrors	10	Question 7
Refraction of Light and Colors	10	-
Lenses and Optical Instruments	10	-
Grade 10 Total Number of Questions		**3**
Total Number of Questions		**7**

As can be seen in Table 1, while 4 questions were asked at the 9th grade level in 2023, 3 questions were asked at the 10th grade level. "Matter and Properties", "Motion and Force", "Work, Power and Energy" and "Heat, Temperature and Expansion" are the subjects that were asked questions at the 9th grade level. At the 10th grade level, questions were asked on "Electric Current and Circuits", " Enlightenment" and " Shadow, Plane Mirrors and Spherical Mirrors".

A detailed explanation and analysis of each question according to TIPP is shown below.

Analysis of Question 1

Question 1 is a question about matter and its properties. Atmospheric measurements are planned to be made with a balloon high above the ground on a newly discovered planet. The mass-volume graph of gases A, B, C and D on this planet at constant temperature and pressure is given. The atmosphere of this planet can be composed of A, B, C or D gases and the balloon can be filled with these gases. It is asked in which of the following situations the balloon can take off from the ground and make atmospheric measurement: filling the atmosphere with A gas and the balloon with a mixture of B and D gases, filling the atmosphere with B gas and the balloon with A gas, and filling the atmosphere with a mixture of C and D gases and the balloon with C gas. The weights of the balloon and the measuring devices on the balloon are neglected.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. Know that the mass of a substance is calculated by dividing its mass by its volume.

2. Know that the mass of a mixture will have a value between the masses of the substances that make up the mixture.

3. Know that the gas or gases filling the balloon must be smaller than the mass of the gases and gases that make up the atmosphere in order for the balloon to be able to lift off the ground.

4. Using the given mass-volume graph, rank the masses of gases A, B, C and D and mixtures of gases B and D and C and D in order of magnitude for each situation asked in the question.

In this first question on matter and its properties, students are expected to recognize the concept of mass and calculate the mass from the mass-volume graph. After calculating the mass, they are expected to make comparisons for different situations. In this framework, according to TIPP, this question requires matching (3-a) at the analysis level.

Analysis of Question 2

Question 2 is a question about motion and force. It is observed that the magnitude of the total displacement of an automobile moving on a highway for 30 seconds is equal to the total distance traveled during this period. Accordingly, it is asked which of the following statements are absolutely true: the car moves at a constant speed for 30 seconds, it travels in the same direction continuously or it moves on a linear path.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. The concept of displacement is equal to the vectorial difference between the final position of an object and its initial position.

2. The path taken is calculated by multiplying the average speed of the object by the total elapsed time.

3. Students should be able to evaluate the equality of displacement and path taken and decide whether the situations given in the question are correct or not.

In the second question from the subject of motion and force, students are expected to know the concepts of displacement and "path taken" and the difference between them. They are expected to decide whether the given situations are correct by using the knowledge that the displacement and the path taken are equal. In this context, it is a question that requires matching (3-a) at the analysis level according to TIPP.

Analysis of Question 3

Question 3 is a question about work, power and energy. It is also a question that seems to be related to the subject of illumination. The average illuminance of 750 candela on the surface of a desk in a room can be provided by any one of 75 watt incandescent filament, 13 watt LED or 40 watt fluorescent bulbs alone. Accordingly, it is desired to compare the electrical energy consumed by incandescent filament, LED and fluorescent bulbs when these bulbs are operated for equal time.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. Know that the mass of a substance is calculated by dividing its mass by its volume.
2. Know that the mass of a mixture will have a value between the masses of the substances that make up the mixture.
3. Know that the gas or gases filling the balloon must be smaller than the mass of the gases and gases that make up the atmosphere in order for the balloon to be able to lift off the ground.

4. Using the given mass-volume graph, rank the masses of gases A, B, C and D and mixtures of gases B and D and C and D in order of magnitude for each situation asked in the question.

In the third question from the topic of work, power and energy, students are expected to remember the formula between electrical energy and electrical power and solve the equation by substituting the given values. In this context, according to TIPP, it is a question that requires executive processing (1-b) at the recall level.

Analysis of Question 4

Question 4 is a question about heat, temperature and expansion. Energy transfer between substances in thermal interaction can be realized by conduction, convection or radiation. Accordingly, the fact that the heat given by the Sun to space can reach the outermost layer of the Earth's atmosphere without the need for a material medium can be given as an example of heat transfer by conduction, radiation or convection.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. Know that energy transfer by conduction and convection is the transfer of energy between particles of matter.
2. Know that energy transfer by radiation is by means of radiation, i.e. electromagnetic waves, and therefore can also take place in a vacuum (an environment where there is no matter).

In the fourth question from the heat and temperature topic, students are expected to remember the properties of heat conduction pathways. In this framework, according to TIPP, the fourth question is evaluated as a question at the recall and recognition level (1-a).

Analysis of Question 5

Question 5 is a question on electric current and circuits. A student constructed an electrical circuit by connecting a battery with neglected internal resistance, a switch and identical K, L, M, N, P and R bulbs. In the first observation, the student touches the tip of the switch to point 1 and observes the brightness of the bulbs. In the second observation, he touches the tip of the switch to point number 2 and observes the brightness of the bulbs. Accordingly, the student is asked which light bulbs' brightness will remain the same for both observations.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. Know that the brightness of lamps depends on their power.
2. Know that electrical power is directly proportional to the resistance of the lamp and the square of the current flowing through the lamp.
3. Draw the circuit when the switch is placed in different positions in the circuit.
4. Know how to calculate the equivalent resistance of a circuit.
5. Know what a short circuit is.
6. Calculate the power of a battery in an electrical circuit.
7. Calculate the power to be allocated to the lamps in an electrical circuit.

In the fifth question on electric current and circuits, students are expected to analyze the circuit and make comparisons. In this context, according to TIPP, this question requires matching (3-a) at the analysis level.

Analysis of Question 6

Question 6 is a question about illumination. A point source of luminous intensity I is placed at the center of a transparent spherical lampshade and suspended from the ceiling by a chain. The intensity of illumination of a point K perpendicular to the lampshade at a distance of K units is E and the total luminous flux passing through the lampshade surface is Φ. In this arrangement, respectively; 1. operation: Remove the transparent spherical lampshade and install another transparent lampshade of smaller radius made of the same material, 2: Painting the entire surface of the new lampshade to be translucent, and 3: Shortening the chain of the lampshade. According to the changes in the intensity of light (I), intensity of illumination (E) and luminous flux (Φ) as a result of the operations performed, the total luminous flux (Φ) passing through the lampshade surface increases at the end of the 1st operation, the intensity of light (I) of the point source decreases at the end of the 1st operation, the intensity of light (I) of the point source decreases at the end of the 2nd operation. The intensity of illumination (E) of point K decreases at the end of the 1st process, the intensity of illumination (I) of the point source increases at the end of the 2nd process, or the intensity of illumination (E) of point K does not change at the end of the 3rd process.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. Know the definition of luminous flux, remember that it does not depend on the radius.
2. Know the definition of luminous intensity, remembering that it depends on the number of light particles emitted per unit time from the source.
3. Know the definition of the intensity of illumination, remember that it is directly proportional to the luminous flux falling on the surface.
4. Know the definition of the intensity of illumination and remember that it is inversely proportional to the square of the perpendicular distance from the light source.

The sixth question, which comes from the topic of enlightenment, expects students to know the basic concepts of luminous flux, luminous intensity and intensity of illumination and to recognize the general properties of these concepts. They are also asked to make calculations related to each concept. In this context, it is a question that requires integration at the comprehension level (2-a) according to TIPP.

Analysis of Question 7

Question 7 is a question about shadows, plane and spherical mirrors. In order to measure the distance between the Moon and the Earth, an astronaut on the Moon wants to place a system on the lunar surface that allows LASER beams sent from the Earth to reflect back on itself. For this purpose, he prepares different setups by using several plane mirrors as well as hollow and bump mirrors with focal point F and center M and places them on the lunar surface. Accordingly, it is asked which systems the astronaut placed on the lunar surface could be.

In the solution of this problem, the basic points that the student should know about the subject will be as follows:

1. Know the rules of reflection in plane mirrors.
2. Know the rules of reflection in spherical mirrors.
3. Apply the rules of reflection in systems using different mirrors.

In the seventh question about plane and spherical mirrors, students are expected to apply the reflection of light in different mirrors. In this context, according to TIPP, this question is evaluated as a question requiring executive processing (1-b) at the retrieval level.

The results of the analysis detailed above are shown together in Table 2.

Table 2

Analysis of 2023 BPT Physics Questions according to TIPP

Question Number	TIPP Level
1	3-a (Analysis-Matching)
2	3-a (Analysis-Matching)
3	1-b (Retrieval- Executing)
4	1-a (Retrieval- Recalling and recognizing)
5	3-a (Analysis-Matching)
6	2-a (Comprehension-Integrating)
7	1-b (Retrieval- Executing)

According to Table 2, 3 of the questions were evaluated as a question at level 1, 1 at level 2 and 3 at level 3. At the 4th level, there were no questions. The question with the lowest level is the 4th question from the subject of heat, temperature and expansion, which is considered to be at level 1-a. In level 1-a questions, students can express basic laws and principles of physics, identify, determine, list, name, recognize and write physical quantities, units, equations, formulas and phrases, ideas, symbols and phenomena. They can also formulate equations and understand how they are applied in the real world. There are 3 questions with the highest level and all of them are at level 3-a. In these questions, students are expected to compare physical quantities, physical phenomena, equations and expressions, organize, distinguish, sort, find similarities or differences and categorize certain details into meaningful groups. Table 3 below shows the distribution, percentages and frequencies of the questions according to the levels.

Table 3

The Distribution of 2023 BPT Physics Questions according to TIPP

Level	Category	Question Number	Frequency	Percentage
1	Retrieval	3, 4, 7	3	42.85
2	Comprehension	6	1	14.30
3	Analysis	1, 2, 5	3	42.85
4	Knowledge Utilization	-	-	-

As can be seen in Table 3, 42.85 percent of the TYT physics questions were at the recall level, 42.85 percent at the analysis level and 14.30 percent at the comprehension level. No questions were asked at the level of knowledge utilization.

Discussion and Results

In this study, the TIPP taxonomy developed by Teodorescu et al. (2013) using NTEO was adapted into Turkish and 7 physics questions asked in the 2023 BPT were analyzed using this taxonomy. According to the results obtained, it was determined that 3 of the 7 questions were at the recall (recall-recognition) level, 1 at the comprehension level and 3 at the analysis level. It was determined that no question was asked at the level of using knowledge.

In the related literature, Qaddafi, Ikbal & Sari, (2022) and Tunnisa, Syamsu & Werdhiana, (2015) used Taxonomy of Introductory Physics Problems (TIPP) in their studies. Qaddafi et al. (2022) analyzed the structure of the cognitive system in the national high school physics exams in 2019 using the Taxonomy of Introductory Physics Problems (TIPP) framework. The findings show that the analyzed questions were designed according to the TIPP principles with the categories of remembering, understanding, analyzing, and using knowledge. The distribution of questions across categories was uneven, with fewer questions in the categories of remembering and understanding than in analyzing and using knowledge. These findings are consistent with this study in terms of the unbalanced distribution of questions across categories.

Tunnisa et al. (2015) used the TIPP to analyze and describe the problem solving skills of students studying physics. Their study revealed that pre-service physics teachers' problem solving skills in particle dynamics were classified as low. One of the factors influencing this is that most of the students only know the equations and their expressions without understanding the concepts behind Newton's laws. Also, students showed low interest in solving problems related to the applications of Newton's laws, which affected their problem solving skills. In the 2023 TYT Science (Physics, Chemistry, Biology) test, the average success rate was 2.91 out of 20 questions (OSYM, 2023b). In this study, although 42.85 percent of the questions were first level, the success rate (2.91/20) was around 14.55 percent. This shows that students in high schools are not able to acquire even the first level in science courses. Considering that the physics test success rate may be even lower, it suggests that students may be at the lower levels of the first level in physics courses in high schools.

The results obtained from this study are generally in line with the related literature. The results of the study show that TIPP can be a good taxonomy that can enable teachers to plan the review, application and evaluation of knowledge and algorithms in solving physics problems. Discussions with related literature emphasize the importance of choosing the appropriate taxonomy for teaching purposes and show that analyzing physics problems can help to identify and understand students' needs.

Recommendations

In this study, physics questions asked in the basic proficiency test (TYT) of higher education entrance exams were analyzed according to TIPP. According to the results obtained, more questions are asked at the first level (retrieval) and third level (analysis). Based on the findings acquired, a greater number of questions are posed at the primary stage of retrieval and the matching stage of analysis. In this context, physics teachers should allow students to express the basic laws and principles of physics in various ways and help them comprehend how these laws and principles are implemented in the real world. Additionally, students should possess the capability to discern physical quantities and occurrences, and to distinguish similarities and disparities when they encounter unfamiliar situations. Classes on the subject of physics should be organized in this particular situation, granting pupils the opportunity to grasp the principles and regulations of physics and gaining knowledge on how to implement them in different situations. Once again, based on the discoveries of this examination, it is recommended that physics educators appropriately configure their appraisal and evaluation procedures. As an illustration, Angraeni et al. (2020) devised a Fluids Assessment (FAss) grounded on the Taxonomy of Introductory Physics Problems (TIPP) for dynamic fluid material. An analysis of validity employing the Rasch Model demonstrated that 17 out of 34 items were deemed valid, and the reliability was classified as "good" with a coefficient of 0.90. The FAss exhibited a relatively moderate level of difficulty, a good power differential, and functioning distractors. The majority of students achieved mastery in all levels of the TIPP, except for levels 3a, 4d, and 4c, which were associated with matching, investigating, and experimenting.

Furthermore, researchers have the capacity to scrutinize previous years' questions on physics in the TYT in accordance with this taxonomy, thereby examining how they have evolved throughout the years. Likewise, apart from the TYT questions, physics questions posed in the Field Proficiency Tests (AYT) can also be investigated utilizing this taxonomy, enabling the making of diverse comparisons.

Lastly, educators have the opportunity to devise physics questions employing this taxonomy, facilitating students to engage in cognitive processes not solely at the lower levels, but also at the upper levels.

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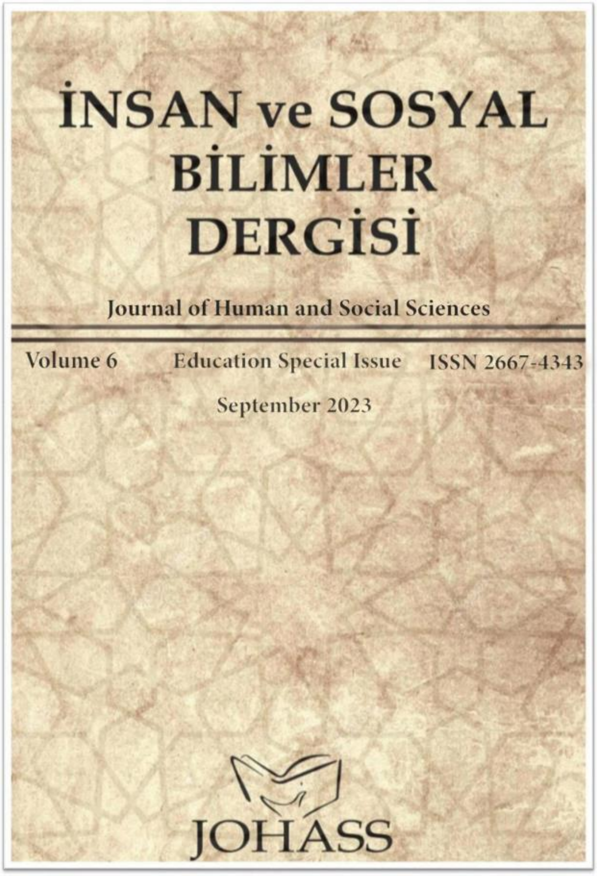

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Primary Education Institutions in the Centre of Kastamonu during and after the Tanzimat Period

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Primary Education Institutions in the Centre of Kastamonu during and after the Tanzimat Period

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Abstract

Education can be defined as the process of disciplining the cognitive and psychomotor skills innate in the individual with certain methods. The skills revealed in the individual begin to be shaped by internal and external stimuli during infancy. Thus, awareness is formed in the behaviours exhibited over time. With the socialisation process, especially external stimuli provide a definite basis for the individual's behaviour on the individual-environment axis. The aim of social and political organisations may be to regulate the individual-environment relationship on an ideal ground and with a system of rules. In this context, educational institutions created for the benefit of society support the individual in cognitive terms and carry out activities to make psychomotor behaviours more aware. The historical memory of education can guide educators in the past, present and future cycle at the point of always achieving the better in the act of educating. In addition, examining the historical antecedents of local educational institutions will contribute to the construction of educational institutions today and to prepare individuals for the future with hope. In this study, it is aimed to introduce the primary educational institutions opened in the provincial centre of Kastamonu during and after the Tanzimat period, namely sıbyan mektepleri (elementary schools), iptidailer (primary schools) and rüştiyeler (secondary schools). Also, information about the establishment process of the schools, curricula, teaching materials, administrators and teachers of the institutions will be discussed.

Keywords: History of education, primary education, İptidai, Rüştiye, Kastamonu

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Introduction

During the history of education in the Ottoman State, the sıbyan schools operated within the framework of the curriculum rules determined by the madrasahs or foundation instructions, and this gradually led to the emergence of a stable teaching structure. Starting from the periods when state institutions were not functioning well, the quest to improve institutions led to the necessity of gradually improving education and educational activities, especially during and after the Tanzimat period (Kodaman, 1988). The sıbyan schools, which were mostly intended for boys, continued their activities in adjoining buildings located next to mosques or masjids in the historical process. Apart from this concept, they also served as independent buildings with masonry and domes. Those operating in independent structures were built by philanthropists and managed according to the procedures and principles of the established foundations (Güçlü, 2020). In addition, the sıbyan schools provided education as part of the mosques and complexes built by the sultans in the city centres. These schools were categorised under different names such as mekteb-i sıbyan (sıbyan's school), darüs-sıbyan (sıbyan's place), muallimhane (teaching place), mektephane (school), darülilim (place of knowledge), darüttalim (place of training) according to the type of activity of the waqf (foundation). There were mixed sıbyan schools as well as schools for girls only, which were mostly the residence of a female teacher. Some sıbyan schools were designed with two floors, the upper floor was used as a classroom and teacher's room, while the lower floor was used for fountains, dispensaries or other needs of the school. As it can be understood from these examples, the purpose of the sıbyan schools was to provide education for children on certain principles, and they operated in all kinds of environments that were institutionalised but not architecturally unified (Unat, 1964).

In time, iptidai schools were transformed to replace the sıbyan schools. Due to the fact that the Sıbyan schools were affiliated to the Ministry of Awqaf and could not be supervised by the Ministry of Education, the 1869 Education Regulation necessitated the establishment of iptidai schools by the Ministry of Education, which would replace the sıbyan schools and provide new-style literacy education. The fact that the old style of teaching reading and writing took a long time and the idea of designing schools that would be attached to rüştiyes and that would perform more modern teaching practices can be considered as other reasons. Accordingly, the first iptidai school started operating in 1872 in a masonry building located in the outbuildings of the Nuruosmaniye Mosque. Iptidai schools started to be established with a circular issued in 1871 (Ergin, 1977).

During the reign of Mahmut II, which was the period in which the western modelled education understanding was grounded in the Ottoman Empire and the planning of educational activities was made, Meclis-i Umur-ı Nafia (Ministry of Public Works) was established in 1838. For the first time, this assembly created a projection of education for the future. With the report dated 1838 prepared by the Meclis-i Umur-ı Nafia, it was proposed to establish a new level of education called “Selatin-i İzam Mektepleri (Great Sultans Schools)” superior to the mahalle mektepleri (neighbourhood schools). It was recommended that a mechanism to supervise these schools be established and that school activities be affiliated to a ministry. The report (Cevad, 2002) also addressed the inadequacy of primary schools, the lack of adherence to a programme in school activities, the introduction of a class system, the need for all individuals to acquire the ability to read and write in primary schools, the need for teachers to focus on teaching and avoid rote learning. The decisions of the relevant commission were presented to Mahmut II, and although many of the decisions could not be implemented, the establishment of “Selatin-i İzam Mektepleri” was accepted and the “Mekatib-i Rüştiye Nazırlığı” was established in 1838 by the Sultan’s will. The first minister of the Ministry of Mekatib-i Rüştiye was İmamzade Esat Efendi and he continued in this position until 1848 (Kodaman, 1988). The Ministry of Mekatib-i Rüştiye was converted into the Ministry of Mekatib-i Umumiye in 1846. In this process, Mekatib-i Rüştiye and Mekatib-i Sıbyan Directorates were abolished and merged under the roof of Mekatib-i Umumiye Müdürlüğü (Public Schools Directorate). However, after a while, the title of the directorate was updated again and it was decided to be the Mekatib-i Umumiye Nezareti (Directorate of Public Schools) (Berker, 1945).

The aim of this study is to introduce the primary educational institutions established in the provincial centre of Kastamonu during and after the Tanzimat period and to examine their activities. The following questions were sought to be answered in the study;

- Which schools were active in the field of primary education in the provincial centre of Kastamonu during and after the Tanzimat period?
- What kind of information on primary education institutions can be accessed?

With this study, data about the basic educational institutions in Kastamonu city center during and after the Tanzimat period will be presented. Thus, an important area in the history of Kastamonu education will be illuminated.

Method

Qualitative research is a holistic study conducted by using data collection methods such as observation, interview and document analysis in order to understand social events and processes. From another point of view, qualitative research can be considered as an activity of understanding and making sense of social manifestations with theoretical grounding and data within a certain system (Yıldırım & Şimşek, 2004). In this framework, document analysis method, which is one of the qualitative research methods, was used in our research. According to this method, documents were first accessed from data sources. Then, the areas related to the subject in those with Ottoman Turkish content were examined. Finally, they were translated into today's Turkish. The content of the documents consisted of Kastamonu and Maarif yearbooks together with the analyzed works. The documents were accessed from the Library of the Turkish Historical Society, the Presidential Millet Library and the Islamic Research Center Ottoman Salnameleri database. The documents were examined in a certain systematic manner and analyzed in order to find answers to the problems. Within the scope of the study, the basic educational institutions in the city center of Kastamonu during and after the Tanzimat period were examined: sıbyan, iptidai and rüştiye schools.

Findings

Brief History of Sıbyan Schools and Kastamonu Sıbyan Schools

Sıbyan schools are the most basic educational institutions in the tradition of Turkish-Islamic states, which have a certain systematisation. These schools, which are integrated with a mosque, are schools where individuals are taught the most basic knowledge and skills that they can exhibit in their social life. Classes in sıbyan schools started early in the morning and continued until afternoon. There were no breaks between classes, and the teacher used one-to-one teaching with the students along with the collective teaching practice. During this period, a student who needed to go to the restroom could go outside while the teacher was teaching to his friend, while the other students continued with the teaching they had to do. Teaching then continued until noon, and students had lunch at home during the lunch break. After the noon prayer was performed in the mosque, the lesson continued until the afternoon prayer. On Thursdays, teaching was half a day, and on the occasion of the Friday holiday, students were sent home after a ceremonial prayer ceremony. In addition to the teaching practices in sıbyan schools, moral behaviours that the individual would apply throughout his life were taught within the framework of certain disciplinary principles. In particular, behavioural achievements such as reverence and respect for teachers and elders, and kissing hands were taught to the individual as part of social norms (Kazıcı, 2020).

The floors of the schools were made of straw (wicker) and the students provided their own cushions to sit on. Students who received education on the floor read their books on their reading desks (rahle). The teacher could easily observe the students from a high place called sedir and warn them when necessary. The students of the sıbyan school were able to utilise their recess time in the courtyard of the mosques or masjids located next door (Özkan, 2014).

The curriculum of the sıbyan schools consisted of reading the Holy Quran and learning prayers. They often served in these schools in addition to their duties as mosque imam or muezzin (Akyüz, 2015). In this respect, teachers were mostly madrasah graduates. In the girls' sıbyan schools, the lessons were mostly given by women who were hafiza and could read books such as Supha-i Sıbyan and Tuhfe-i Vehbi. The staff of the sıbyan school, which operated in accordance with the foundations, consisted of teachers, journeymen and doormans whose daily salaries were determined in accordance with the foundation regulations. In-kind or cash donations could be requested from wealthy families for the school's expenditures and other expenses. Some endowments strictly forbade the receipt of such donations as "one akçe (penny) and one habbe (grain) from the children in the name of weekly wages". Students started the sıbyan school at the age of 4-5 with a ceremony within the means of their families. The expectations of the sıbyan school were to teach children how to read the Qur'an with tajwid, to give them the ability to perform four operations, to teach them basic Islamic faith, worship and basic moral teachings. Although there were no specific rules for graduating from the school, it was considered a prerequisite to have read the Holy Qur'an once and to learn to read and write at a certain level. After the sıbyan school, students could either participate in social life or continue their education at a higher level in madrasahs (Unat, 1964).

Bayezid II had a sıbyan school built adjacent to the south wall of the Bayezid Mosque. Requirements for the students of the sıbyan school were specified in the foundation document. Accordingly, the qualities sought for the teacher of the school were stated as being a hafiz, having the ability to lead prayers, and having teaching skills. Thirty students, who were prioritised for being poor, were required to recite the Holy Qur'an, learn various prayers, have the knowledge to perform prayers properly, and learn religious and moral teachings at the school, except on Fridays. In addition, prayers for the founder of the foundation and his relatives were requested at the end of the school day. A hafiz and a journeyman (assistant teacher) were requested to be assigned for the students to instruct (Ergin, 1977).

Feridun Ahmet Bey’s sıbyan school, built in İstanbul in the 16th century, stands out as a prominent example of its era. It was planned as two separate buildings in the same courtyard and implemented a two-tier education model. In the first of these two buildings, called “Muallimhane-i Sıbyan” and “Muallimhane-i Sübban”, the activity of learning to read the Holy Qur’an was carried out, while in the other one, besides teaching the syntax and grammar features of Turkish, Arabic and Persian, courses such as logic and theology were also taught. The first regulation for sıbyan schools was Mahmut II’s decree that made attendance at sıbyan schools compulsory for boys before adolescence. The phrases in the decree stating that “they should properly learn the Islamic principles of theology and Sharia and should not be employed earlier and that tradesmen should not accept such people as apprentices” define this obligation (Unat, 1964).

Another decree of Mahmut II is also important in terms of demonstrating the importance given by the state rulers to the students of the sıbyan school. According to the information stated in the edict dated 1809, approximately 20000 sıbyan school students in İstanbul were brought to the Sublime Porte to be rewarded and to increase their loyalty to the state, and they were offered sweets and given pocket money of 10 Turkish Liras (approximately 10 pieces of candy apples) to make them happy. It is also understood from the information provided that this practice was carried out from time to time (Akyüz, 2015).

Tanzimat education was ideologically shaped not only to modernize the structure operating under the name of schools in the capital, but also to provide equal education and training standards to individuals in need of knowledge in the provinces. The steps to be taken in this context led to the idea of expanding and reforming the sıbyan schools, which were the most deeply rooted educational infrastructure of the Ottoman state. In order to eliminate the danger of the state's disintegration, the individuals attending the sıbyan schools would be enlightened without discrimination between Muslims and non-Muslims, and thus a sense of Ottomanism would be created (Sakaoğlu, 2003).

With the establishment of the Mekatib-i Umumiye Nezareti in 1846 during the Tanzimat period and the “Instruction to be Implemented to Sıbyan Schools’ Teachers on How to Implement the Education and Training of the Children in Accordance with the Regulations” prepared by the Education Council in 1847, official regulations for sıbyan schools were carried out in a more systematic manner (Unat, 1964). In the aforementioned instruction, the general framework of education, the quality of teaching materials, various provisions on discipline, attendance principles, duration of education, the characteristics of the teaching staff, and teachers' salaries were set out and regulated. In this context, education and training activities included teaching the elifba (The Qur'anic alphabet) first, then the amma juz and the other juz in order, teaching the words from a Turkish dictionary page by page after the completion of the juz, teaching ethical treatises, as well as calligraphy, ethics (behavioral knowledge), and teaching tajwid after the second completion of the juz. Each classroom had a blackboard and each student was required to have two pens, ink and a divit. Among the disciplinary principles to be applied by teachers in classrooms, practices such as beatings and falaka (foot whipping) were prohibited. In addition, scolding students in a way that would not hurt them, punishing them by separating them from other students, making them stand, and mildly hitting them with the permission of their parents were among the penalties determined within the framework of discipline. It is stated that students who are successful in their studies will be praised among the other students in the class. Students were required to start school at the age of seven. Earlier initiation was subject to parental permission. Parents who did not send their children to school on time were subject to mild penalties under "tazir". Those between the ages of 7 and 11 who were apprenticed to various professionals were exempted from school by attending one hour of moral lessons in the morning. Sıbyan schools were disciplined within an educational activity plan based on four academic years. Students who failed the end-of-semester examinations after four years were required to repeat the grade for one more year. Finally, it was accepted that students would be considered to have completed seven years of schooling. The school was to be staffed by a teacher who would teach Elif-ba, Risale-i Ahlakiye, İlmihal, Qur'an and Tajwid. In addition, as an assistant teacher, a single individual or, if possible, a student who was better than the others in the school was assigned to repeat the courses (Berker, 1945). The decisions taken by the Education Council can be considered as the first important steps of the western-style education model in the Tanzimat period.

In the following period, the regulation that clearly laid out the charter of the sıbyan schools was established with the 1869 Maarif-i Umumiye Nizamnamesi (Regulation for General Education). According to the regulation, it was accepted to establish at least one sıbyan school in each neighborhood and village and to categorize them as 'girls' and 'boys' as well as 'Muslim' and 'non-Muslim' schools. It was decided that the school would provide a four-year curriculum. The ages of 6-10 for girls and 7-11 for boys were foreseen to attend this school. In the following period within the perspective of primary education, it was planned that a more organized and systematic education would be provided in iptidaiye schools, and in places where the state could not adapt iptidaiye schools in the traditional sense, sıbyan schools continued their activities until the 1924 Tevhid-i Tedrisat Kanunu (Law on Unity of Teaching) (Unat, 1964).

The sıbyan schools in the provincial center of Kastamonu operated within the framework of the procedures and regulations applied in other provinces of the Ottoman Empire. In a document dated 1875, there is a request from the Porte for 500 İlmihal, Elif Ba, Amme and Tebareke parts for the sıbyan schools in the center of Kastamonu, indicating that there were approximately 500 students in 27 sıbyan schools in total (BOA, 1875/1292, MF.İBT: 5/38). Although Ozanoğlu (1952: 56) states that there were 581 sıbyan schools within the borders of today's province in 1872 based on the information in the salnames (yearbooks), this number may be considered exaggerated or erroneous in terms of the conditions of the period.

Table 1

Number of Sıbyan Schools in Kastamonu Province Center

Years	Muslim Sıbyan School	Non-Muslim Sıbyan School	Newly Built	Restored
1871	27	2		
1872			1	
1873			1	1
1874	27	2		
1875	27	2		
1876	27	2		
1877	27	2		

Sources: S.V.K, 1288/1871, p.124; S.V.K., 1289/1872, p.130; S.V.K., 1290/1873, p.136; S.V.K., 1291/1874, p.159; S.V.K., 1292/1875, p.172; S.V.K., 1293/1876, p.150; S.V.K., 1294/1877, p.170.

Brief History of Iptidai Schools and Kastamonu Iptidai Schools

The iptidai schools were conceived as schools with more up-to-date curricula to replace the traditional sıbyan schools. The Ministry of Education, which could not make any regulations regarding the sıbyan schools operating under the control of the Ilmiye class and the Ministry of Evkaf, regulated the conditions for the establishment of iptidai schools, which were the counterparts of the sıbyan schools and taught with newer teaching methods, with this circular. The desire to establish iptidai schools based on the most basic requirements is important in terms of indicating both the urgency and the difficulties the state was facing. In 1881, the name of the “Mekatib-i Sıbyaniye” administration operating under the Ministry of

Education was changed to "Mekatib-i İptidaiye Administration". This may mean that this was done in order to replace the term "sıbyan" in the memory of the society with the term "iptidai", which was used in the sense of beginning (Türk, 2016).

Table 2

Curriculum of the Iptidai Schools

Courses	First Grade	Second Grade	Third Grade	Total
Elif-Ba (The Qur'anic Alphabet)	12			12
Kur'an-ı Kerim (The Holy Qur'an)	12	6	5	23
Tecvit (Tajwid)		6	2	8
İlmihal (Ethics)	2	3	3	8
Ahlak (Morality)		2	2	4
Sarf-ı Osmani (Ottoman Grammar)			2	2
İmla (Ortography)	3	3	2	8
Kıraat (Qira'at)	3	2	1	8
Tarih (History)			2	2
Coğrafya (Geography)		2	2	4
Hesap (Calculus)	1	2	2	5
Hüsn-ü Hat (Islamic Calligraphy)	1	2	2	5
Total	34	28	25	

Source: Kodaman, 1988: 88.

When the 1891 curriculum of Dersaadet (İstanbul) and provincial iptidai schools was examined (Kodaman, 1988), it was observed that it was similar to the curriculum of rüştiye schools. The reason for such a practice may be the idea of preparing the individuals for the next school level through similar courses by equipping them with basic knowledge. According to 1913 records, there were 1 iptidai school with one classroom, 70 schools with two classrooms, 69 schools with three classrooms, and 11 schools with six classrooms in the center and towns of Kastamonu (Aytekin, 1988).

Table 3

Number of Students in Kastamonu Provincial Center Iptidai Schools

Schools	1889	1892	1893	1894	1896	1899	1903
Taş Mektep	73	95					
Yarıbcı	111	139	138	134	134	145	98
Deveciler	91	96	95	69	27	27	56
Nasrullah	73	125	118	93	123	129	60
İsmail Bey	22	27	11	30	40	45	46
Server	44	50	20		14	53	57
Sinan Bey	15	24					10
Numune							101
Zihnizade							12

Sources: S.V.K., 1306/1889, p.270; S.V.K., 1310/1892, p.339-340; S.V.K., 1311/1893, p.121-122; S.V.K., 1312/1894, p.156; S.V.K., 1314/1896, p.131; S.V.K., 1317/1899, p.152; S.V.K., 1321/1903, p.166-167.

The table above the number of students in the central iptidai schools were analyzed, it was seen that the number of students in the Yarıbcı, Nasrullah, and Deveciler iptidai schools were in line with the densely populated areas. In addition, the reason for the fluctuations in the number of students may be the lack of staff in some schools. Also the table below shows the teaching and administrative staff of the iptidai schools in the provincial center.

Table 4

Teacher and Administrative Staff of Kastamonu Provincial Center Iptidai Schools

Schools	1889	1892	1893	1894	1896	1899	1903
Taş Mektep	Refik Efendi Mustafa Ağa (Staff)	Refik Efendi					
Yarıbcı	Hamdi Efendi	Mehmet Efendi	Hamdi Efendi	Hamdi Efendi	Hamdi Efendi	Hamdi Efendi	Hamdi Efendi
Deveci-ler	Hafız Abdur-rahman Efendi	Hafız Abdur-rahman Efendi	Hafız Abdurrahman Efendi	Hafız Abdur-rahman Efendi	Hafız Abdur-rahman Efendi	İsmail Efendi	İsmail Efendi
Nasrul-lah	Osman Efendi	Osman Efendi	Osman Efendi	Osman Efendi	Osman Efendi	Osman Efendi	Osman Efendi
İsmail Bey	Naim Efendi	Naim Efendi	Naim Efendi	Hafız Hasan Efendi	Hafız Hasan Efendi	Hafız Hasan Efendi	Bahaeddin Efendi
Server	Hafız Ahmet Efendi	Hafız Ahmet Efendi	Hafız Ahmet Efendi		Hafız Mehmet Efendi	Hafız Mehmet Efendi	Hafız Mehmet Efendi
Sinan Bey	Mehmet Efendi	Mehmet Efendi					Hacı Abdülaziz Efendi
Numune							Hafız Sabri Efendi Hafız Remzi Efendi
Zihni-zade							Hafız Hakkı Efendi

Sources: S.V.K., 1306/1889, p.270; S.V.K., 1310/1892, p.339-340; S.V.K., 1311/1893, p.121-122; S.V.K., 1312/1894, p.156; S.V.K., 1314/1896, p.131; S.V.K., 1317/1899, p.152; S.V.K., 1321/1903, p.166-167.

Hepkebirler Girls' Iptidai School

In addition to the central iptidai schools in Kastamonu, there was also a girls' iptidai school as of 1892. In the salnames (yearbooks) (1893, 1894, 1896, 1899), information about Hepkebirler Girls' Iptidai School was presented separately from other iptidai schools. The table below shows the weekly curriculum of the girls' iptidai schools.

Table 5

Weekly Curriculum for Girls' Iptidai Schools

Courses	First Grade	Second Grade	Third Grade	Total
Elif-Ba (The Qur'anic Alphabet)	(24)			24
Kur'an-ı Kerim (The Holy Qur'an)	6	6	6	18
Tecvit (Tajwid)		1	2	3
İlmihal (Ethics)		2	2	4
İmla (Ortography)	8	5	4	17
Kıraat (Qira'at)	8	5	4	17
Sarf-ı Osmani (Ottoman Grammar)		1	2	3
Hesap (Calculus)	1	2	2	5
Hüsn-ü Hat (Islamic Calligraphy)	1	2	2	5
Total	24	24	24	

Source: M.S. (Education Yearbook), 1316/1898: 338.

During the Second Constitutional Monarchy period, the curriculum of girls' iptidai schools was enriched and courses such as morality, history, geography, goods, handicraft, painting, music, gymnastics, domestic management, sewing and embroidery were added to the curriculum (Tümer Erdem, 2013). The following table shows the staff and number of students at Hepkebirler Girls' Iptidai School.

Table 6

Staff and Number of Students at Hepkebirler Girls' Iptidai School

Years	Number of Students	Teacher
1892	25	Safiye H.
1893	35	Fatma H.
1894	35	Fatma H.
1896	35	Fatma H.
1899	27	Fatma H.

Sources: S.V.K., 1310/1892, p.339; S.V.K., 1311/1893, p.121; S.V.K., 1312/1894, p.156; S.V.K., 1314/1896, p.131; S.V.K., 1317/1899, p.152.

Compared to the number of students in other iptidai schools, Hepkebirler Girls' Iptidai School should have had a higher number of students.

Brief History of Rüştiye Schools and Kastamonu Rüştiye Schools

Boys' Rüştiye

In 1847, the first rüştiye school in the Ottoman Empire was established under the name of Davutpaşa School in İstanbul with the special efforts of Kemal Efendi, the then Minister of Mekatib-i Umumiye, who would later be appointed as the Minister of Education.

At the end of the first academic year of Davutpaşa Rüştiye School, at the graduation ceremony held with the participation of the Sultan, the success of the students was recognized by the Sultan, which increased the number of Rüştiye Schools to five within a year. In 1848, Fatih Darülmuallimin-i Rüştiyesi (Teacher Training School for Rüştiye Schools) was opened in order to meet the teacher needs of the Rüştiye Schools, which increased in number in a short time and carried out modern-style teaching activities, and new Rüştiye Schools were opened in the provinces as the number of teacher candidates graduating from this school increased (Öztürk, 2008). In 1852, the number of rüştiye schools in İstanbul was 10, while in 1853, the necessary will and economic resources were obtained to open 25 more rüştiye schools in major centers. Thus, construction works were initiated for the 25 planned rüştiyes, 7 in Anatolia, 15 in Rumelia and 3 in the Aegean islands (Kodaman, 1988). Accordingly, the first Rüştiye School in the provinces was opened in 1855 (Alkan, 2000). At the time of the 1869 Regulation, the number of rüştiye schools in İstanbul was 12-13, while this number reached 87 in the provinces (Kodaman, 1988). In 1875, only in İstanbul (Darülmaarif, Aksaray-Mahmudiye, Sultan Bayezid, Takvimhane, Şehzade, Zeyrek, Fatih, Sultan Selim, Galata, Mirgûn, Beşiktaş, Tophane-Fevziye, Sütlüce, Davutpaşa, Eyüp, Üsküdar-Atik, Üsküdar-Atlamataşı, Beylerbeyi, Kanlıca, Odabaşı, Tophanelioğlu provinces) There were 21 boys' rüştiye schools. As of 1875, 178 teachers were working in these schools and 1795 students were studying. In the same year, 89 students graduated from these schools (Sakaoğlu, 2003). Considered as secondary education institutions that prepared individuals for higher education at the time of their inauguration, over time, these schools continued to serve as primary schools. The rüştiye schools were considered to be the primary level of the idadi schools, the first of which was opened in 1874. Thus, two types of idadi school structures were established: a seven-year idadi school with a rüştiye in provincial centers and a five-year idadi school with a rüştiye in sanjak centers.

During the reign of Abdülhamid II, the rüştiyes in the provinces were transformed into institutions that trained public personnel for government offices. During the Second Constitutional Monarchy, efforts to include the rüştiyes in the primary education level increased, and finally, with the Tedrîsât-ı İbtidâiyye Kannûnûn-ı Muvakkati (Temporary Law on Primary Education), which was put into effect in 1913, the rüştiyes were incorporated into the iptidai schools, whose education period was increased to six years, and they completely lost their identity (Öztürk, 2008).

In the 1898 Maarif Salname (Education Yearbook), the three-year weekly curriculum for rüştiyes includes course titles and weekly course hours:

Table 7

Weekly Curriculum of Boys' Rüştiye

Course Title	***1st Grade***	***2nd Grade***	***3rd Grade***	***Total***
Türkçe (Turkish)	7	6	4	17
Tecvitli Kur'an-ı Kerim ve Ulum-ı Diniyye (Qur'an with Tajwid and Theology)	3	2	2	7
Coğrafya (Geography)	2	2	2	6
Hesap (Calculus)	2	2	2	6
Arapça (Arabic)	1	2	2	5
Tarih (History)	-	2	2	4
Farsça (Persian)	-	1	2	3
Fransızca (French)	-	-	3	3
Hüsn-ü Hat (Islamic Calligraphy)	1	1	1	3
Malumat-ı Nafia ve Hıfzıssıhha (Beneficial Knowledge and Public Hygiene)	1	1	1	3
Resim (Painting)	1	1	1	3
Hendese (Geometry)	-	-	1	1
Total	**18**	**20**	**23**	**61**

Source: M.S., 1316/1898: 191.

When the table was examined, the importance of the Turkish course in the curriculum compared to other courses is noteworthy. The Turkish course, which was seven hours in the first grade, was gradually reduced to six hours in the second grade and four hours in the third grade. In the first grade, the courses of Quran with Tajwid and Theology, Geography, Calculus, Arabic, Islamic Calligraphy, Beneficial Knowledge ve and Public Hygiene, and Painting were included in the students' curriculum according to their level of importance. History and Persian courses were included in the program from the second grade onwards, and geometry courses from the third grade onwards. The fact that the total emphasis of the geography course in the program was six hours together with the calculus course, while the history course was four hours in total, may mean that the geography course was given more importance than the history course. The table below shows the staff and number of students in the Kastamonu Boys' Rüştiye School.

Table 8

Kastamonu Boys' Rüştiye Staff and Number of Students

Years	Number of Students	Teacher	Assistant Teacher	Assistant Teacher	Reqa' (Writing Course) Teacher	Staff
1869	70	Behçet Efendi	Hüseyin Efendi		Rauf Bey	
1870	75	Behçet Efendi	Hüseyin Efendi		Rauf Bey	Mehmet Ağa
1872	106	Behçet Efendi	Hüseyin Efendi		Mehmet Cemil Bey	Mehmet Ağa
1874	112	Behçet Efendi	Hüseyin Efendi		Mehmet Cemil Bey	Mehmet Ağa
1875	130	Behçet Efendi	Hüseyin Hilmi Efendi		Mehmet Cemil Bey	Hüseyin Efendi
1876	150	Behçet Efendi	Hüseyin Efendi	Mehmet Necati Efendi	Hafız Mehmet Efendi	Hüseyin Ef.
1877	150	Behçet Efendi	Hüseyin Efendi	Mehmet Necati Efendi	Hafız Mehmet Efendi	Hüseyin Ef.
1878	170	Behçet Efendi	Hüseyin Efendi	Mehmet Necati Efendi	Hafız Mehmet Efendi	Hüseyin Ef.
1879	162	Behçet Efendi	Kadı Mehmet Emin Efendi	Mehmet Necati Efendi	Hafız Mehmet Efendi	Hüseyin Ef.
1880	136	Ali Behçet Efendi	Kadı Mehmet Emin Efendi	Mehmet Necati Efendi	Hafız Mehmet Rüştü Efendi	Hüseyin Ef.
1881	74	Ali Behçet Efendi	Kadı Mehmet Emin Efendi	Mehmet Necati Efendi	Hafız Mehmet Rüştü Efendi	Hüseyin Ef.
1882	81	Ali Behçet Efendi	Kadı Mehmet Emin Efendi	Mehmet Necati Efendi	Hafız Mehmet Rüştü Efendi	Hüseyin Ef.

Sources: S.V.K., 1286/1869, p.71; S.V.K., 1287/1870, p.95; S.V.K., 1289/1872, p.110; S.V.K., 1291/1874, p.135; S.V.K., 1292/1875, p.149; S.V.K., 1293/1876, p.131; S.V.K., 1294/1877, p.156; S.V.K., 1295/1878, p.108; S.V.K., 1296/1879, p.116; S.V.K., 1297/1880, p.77; S.V.K., 1298/1881, p.76; S.V.K., 1299/1882, p.82.

Girls' Rüştiye

The first girls' rüştiye in the Ottoman Empire, Cevri Kalfa İnas Rüştiyesi, also called Sultanahmet Girls' Rüştiyesi, was opened in 1859. The expansion of girls' rüştiye schools in Anatolia was not as rapid as that of boys' rüştiye schools. Most of the time, it was difficult to find staff for these schools; Isparta Girls' Rüştiyesi, opened in 1875, could not operate until 1907 because a new teacher could not be allocated after the death of the teacher (Akyüz, 2015). Advertisements were placed in the newspapers of the period to increase interest in girls’ rüştiye schools. A newspaper advertisement dated 1861 states that “reading and writing is essential for both men and women, and that men, who have to do hard labor to earn a living, will be able to be comfortable in their household chores only if women, knowing their religion and world, obey their husbands’ orders and refrain from doing what they do not want, and if they protect their chastity and become people of contentment” (Ergin, 1977).

Article 27 of the 1869 Educational Regulation envisaged the opening of separate rüştiye schools for Muslims and separate rüştiye schools for non-Muslims in major cities. This was considered for areas with more than five hundred households. Article 28 stipulated that the teachers of the schools had to be female, and in the absence of female teachers, male teachers could be employed. It was emphasized that education in non-Muslim girls’ rüştiye schools would be provided in the local languages of the school's students, and that the students’ own languages would be taught instead of Arabic and Persian in the language courses specified in the program. It was stated that girls who completed the sıbyan school would be enrolled in these schools if they declared a diploma, and that exams would be organized for those who did not have a diploma. It was stated that the schools would follow the annual calendar of the boys’ rüştiye schools in case of vacations, etc. (Unat, 1964). The following table shows the weekly schedule for girls' rüştiye school classes.

Table 9

Schedule of Weekly Class Hours in Girls’ Rüştiye Schools

Course Title	***1st Grade***	***2nd Grade***	***3rd Grade***	***4th Grade***	***5th Grade***	***6th Grade***	***Total***
The Holy Qur’an and Tajwid	4	6	5	3	2	1	21
Theology		2	2	2	2	2	10
Qira’at	4	4	4	2	1	1	16
Ortography	4	4	3	2	1	1	15
Scribing					1	1	2
Principles of the Ottoman Language			2	2	1	2	7
Arabic					2	2	4
Persian					1	1	2
Islamic Calligraphy		2	2	1	1	1	7
Beneficial Knowledge ve and Public Hygiene	2	2	2	1	1	1	9
Home Management Training				2	2	2	6
Morality				1	1	2	4
Health Education					1	1	2
Calculus	2	2	2	2	1	1	10
Geography				2	2	2	6
History				2	2	1	5
Handicraft	2	2	2	2	2	2	12
Total	18	24	24	24	24	24	

Source: M.S., 1316/1898: 393.

In the Kastamonu newspaper (Kastamonu, 440:2) about the graduation ceremony of the girls' rüştiye school in 1885, there was some important information about the school. At the end of the academic year in June, in a ceremony attended by the administrators of the city, various questions were asked to the students, and the students responded to the questions with answers that were appreciated by those present at the ceremony. During the ceremony, administrators made speeches to the students and participants. The names of the students of the 1884-1885 school year were also included in the same news article.

Table 10

1884-1885 Academic Year Girls' Rüştiye School Student List

Grade	Students
First Grade	Yılanlı Şeyhzade Hafize Zehra H., Paçacızade Hafize Zübeyde H., Hacı Bayıkzade Mükerreme H., Ali Efendi Cariyesi (concubine) Zerafet
Second Grade	Uğurluzade Emine H., Güldamlasızade Hafize Huriye H., Karamanlızade Hafize Emine H., Hasan Bayraktarzade Hafize Şefika H., Çorumlu Efendizade Safiye H.
Third Grade	Hocazade Fatma H., Kalycızade Hayriye H., Keçecizade Hafize Cemile H., Çilingirzade Hafize Behiye H., Muhacirinden Mehmet Ağazade Zefure H., Kazancızade Hafize Rabia H.
Fourth Grade	Kara Kadızade Zehra H., Hasan Efendizade Hafize Safiye H., İsmail Ağazade Hafize Havva H., Sadi Şeyhzade Kamile H., Simitçi Ahmet Ağazade Saide H., Malakzade Hatice H., Üzengicizade Ayşe H.
Constant Attendance	Tataroğlu kerimesi (sister) Hacere, Hacı Mehmetoğluzade Reşide H., Tatlıoğluzade Safiye H., Hattat Efendizade Hamide H., Molla Hocazade Âmine H., Halil Efendizade Âmine H., Mütevellizade Şerife H., Tarakçızade Adeviye H., Tosyalızade Hafize Zeliha H., Muhacirinden Mehmet Ağazade Âmine H., Kantarcızade Sıddıka H., Defterdar Efendi cariyesi Hatice, Hâkim Efendi cariyesi İkbal

Source: Kastamonu, 440:2.

In 1874, there were 30 students in Sultanahmet Rüştiye School, 22 in Şehzade Rüştiye School, 29 in Aksaray Rüştiye School and 33 in Beşiktaş Rüştiye School in İstanbul (Ergin, 1977). In 1876, the number of students in Kastamonu Girls' Rüştiye School was 37. When the school enrollment in İstanbul was compared with the number of students in Kastamonu Girls' Rüştiye School, one can say that the rate of girls being sent to school in Kastamonu was high. In 1885, the school had 35 students. It is understood that some of the students were members of important families in the city today. The fact that about half of the students were "hafize (hafiza)" may indicate that the institution of hafiza had an important place among girls at that time. It was also observed that concubines ("cariyes") were also admitted to the school as students.

Table 11

Teacher Staff and Number of Students in the Girls' Rüştiye School

Years	Number of Students	Arabic, Persian and Calligraphy Teacher	Mathematics Teacher	Embroidery Teacher	Staff
1876	37	Hafize Zeliha Bakiye H.	Behçet Efendi	Âlime H.	Hatice H.
1877	37	Hafıze Zeliha Bakiye H.	Behçet Efendi	Âlime H.	Hatice H.
1878	45	Hafıze Zeliha Bakiye H.	Behçet Efendi	Âlime H.	Hatice H.
1879	27	Hafıze Zeliha Bakiye H.	Behçet Efendi	Âlime H.	Hatice H.
1880	32	Hafıze Zeliha Bakiye H.	Behçet Efendi	Âlime H.	Hatice H.
1881	34	Hafıze Zeliha Bakiye H.	Behçet Efendi	Âlime H.	Hatice H.
1882	21	Hafize Zeliha Bakiye H.	Behçet Efendi	Safiye H.	Hatice H.
1889	45		Ali Behçet Efendi	Zeviçe H.	Halime H.
1892	35	Ülfet H.			
1893	79	Hafize Zeliha H. Safiye H. Şefika H.		Zeviçe H.	
1894	68	Hafize Zeliha H. Safiye H. Şefika H.		Zeviçe H.	Huriye H. (Teacher's aide)
1896	45	Hafize Zeliha H. Safiye H. Şefika H.	Behçet Efendi	Zeviçe H.	Huriye H. (Teacher's aide)
1898	57	Hafize Zeliha H. Safiye H. Şefika H.	Behçet Efendi	Hafize Huriye H.	
1899	62	Hafize Zeliha H. Safiye H. Şefika H.	Behçet Efendi	Huriye H.	Hafize Huriye H. (Teacher's aide)
1900	62	Hafize Zeliha H. Safiye H. Şefika H.	Behçet Efendi	Huriye H.	
1901	61	Hafize Zeliha H. Safiye H. Şefika H.	Ali Behçet Efendi	Huriye H.	
1903	76	Hafize Zeliha H. Safiye H. Şefika H.	Behçet Efendi	Huriye H.	

Sources: S.V.K., 1293/1876, p.131; S.V.K., 1294/1877, p.156; S.V.K., 1295/1878, p.108; S.V.K., 1296/1879, p.116; S.V.K., 1297/1880, p.77; S.V.K., 1298/1881, p.76; S.V.K., 1299/1882, p.82; S.V.K., 1306/1889, p.269; S.V.K., 1310/1892, p.338; S.V.K., 1311/1893, p.338; S.V.K., 1312/1894, p.155; S.V.K., 1314/1896, p.131; M.S., 1316/1898, p.1128; S.V.K., 1317/1899, p.152; M.S., 1318/1900, p.1485; M.S., 1319/1901, p.735; S.V.K., 1321/1903, p.166.

Military Rüştiye School

The structure of schools such as Harbiye (Military), Bahriye (Marine), Topçu (Artillery), Mühendishane (Engineer's School), which were opened in the 18th century, changed during the Tanzimat period, and from 1847 onwards they were transformed into institutions operating at the level of idadi. In order to meet the need for individuals to be trained in the lower levels of these schools, Military Rüştiye Schools were established for the first time in 1875. The number of the first three military rüştiye schools increased over time. Military rüştiye schools were opened in Gülhane, Soğukçeşme, Kocamustafapaşa, Fatih, Eyüp, Kasımpaşa, Beşiktaş, Üsküdar Paşakapısı and Üsküdar Toptaşı. They continued to be gradually opened in the provincial centers as needed.

When they were first established, the education period of military rüştiye schools was planned to be three academic years, but later this period was changed to four years. Their curricula were equivalent to those of other military schools and French was taught in addition to Arabic and Persian. There was a particular emphasis on painting (Ergin, 1977). The courses offered in the three-year program were as follows: *İmla (Ortogpraphy), Hüsn-i Hatt-ı Rik'a (Islamic Calligraphy), Usul-i Terkib (The Method of Compositon), Sarf-ı Osmani (Ottoman Grammar), Kıraat-ı İbare-i Türkiyye (Qira'at of the Expression "Türkiyye"), İlm-i Hal (Ethics), İsagoci ve Tatbikat (Isagoge and Practice), Sarf-ı Arabi (Arabic Grammar), Nahv-ı Arabi ve Kavaid-i Arabiye (Arabic Grammar), Talimü'l-Farisi (Teaching Persian), Kavaid-i Farisi (Persian Grammar), Mükemmel İlm-i Hesap (Complementary Arithmetic), Gülistan (Gulistan by Sa'di), Nasihatü'l-Hükema (Advice from the Sages), Coğrafya (Geography) and Resim (Painting)* (Patoğlu, 2018). Since the administration of military rüştiye schools was undertaken by soldiers, the administration of these schools seems to have been more disciplined than other schools. Students attended school in military uniforms. Since there was no obligation for the students who graduated from the school to attend military idadis, some of those who graduated from this school went on to attend civil idadis or continued their lives as civil servants. Quarterly exams were held at the school, and at the end of the year, exams prepared by the teachers of the idadi were administered. Successful students were promoted to the next grade or graduated. Military rüştiye schools continued their existence until the Second Constitutional Monarchy, when they were merged with civil rüştiye schools in accordance with the decision taken during this period (Ergin, 1977).

Kastamonu Military Rüştiye School was opened on May 14, 1883. The reason for the opening of the Military School was stated in the news in the newspaper, such as the parents' desire for their children to continue their education in Kastamonu and the inability of every parent to send their children to İstanbul due to financial constraints. At the opening of the school, Governor and Court President Rıza Efendi made opening speeches. The prayer of the Mufti of Kastamonu was accompanied by all the participants saying “Âmin”, and they chanted “Long live the Sultan” as part of a tradition. The school was built with the aid of Hacı Osman Ağa, the trustee of the Sheikh Muhyiddin Yavsi Efendi of İskip Foundation, with an endowment of thirty thousand kuruş (Kastamonu, 487: 1). The table below shows the administrative staff of Kastamonu Military Rüştiye School.

Table 12

Administrative Staff of Kastamonu Military Rüştiye School

Years	Principal	Internal Affairs Officer(s)
1889	Ferit Efendi	Şevket Bey (Mülazım-ı evvel (First lieutenant)), Ahmet Faik Efendi (Mülazım-ı evvel), Hafız Kadri Efendi (Mülazım-ı evvel)
1892	Ferit Efendi (Kolağası (Lieutenant Colonel))	Bekir Efendi (Yüzbaşı (Captain)), Nuri Efendi (Mülazım (Lieutenant)), Faik Efendi (Mülazım)
1893	Ferit Efendi (Kolağası)	Bekir Efendi (Yüzbaşı), Adil Efendi (Mülazım-ı Evvel), Vasıf Efendi (Mülazım-ı Sani (Second lieutenant))
1894	Ferit Efendi (Kolağası)	Bekir Efendi (Yüzbaşı), Adil Efendi (Mülazım-ı Evvel)
1896	Ferit Efendi (Kolağası)	Bekir Efendi (Yüzbaşı), Vasıf Efendi (Mülazım-ı Evvel), Şemsettin Efendi, Hasan Sabri Efendi
1898	Ahmet Şükrü Efendi (Kolağası)	Bekir Efendi (Yüzbaşı), Şemseddin Efendi (Mülazım-ı Evvel), Mehmet Vasıf Efendi (Mülazım-ı Evvel), Hasan Sabri Efendi (Mülazım-ı Sani)
1899	Ahmet Şükrü Efendi (Kolağası)	Selim Efendi (Yüzbaşı), Vasıf Efendi (Mülazım-ı Evvel), Şemsettin Efendi (Mülazım-ı Evvel), Hasan Sabri Efendi (Mülazım-ı Evvel)
1900	Ahmet Şükrü Efendi (Kolağası)	Mehmet Selim Efendi (Yüzbaşı), Şemsettin Efendi Efendi (Mülazım-ı Evvel), Mehmet Vasıf Efendi (Mülazım-ı Evvel), Hasan Sabri Efendi (Mülazım-ı Evvel)
1901	Ömer Lütfi Efendi (Kolağası)	Mehmet Selim Efendi (Yüzbaşı), Hasan Sabri Efendi (Mülazım-ı Evvel), Eyüp Sabri Efendi (Mülazım-ı Evvel)
1903	Ömer Lütfi Efendi (Kolağası)	Selim Efendi (Mülazım-ı Evvel), Eyüp Sabri Efendi (Mülazım-ı Sani)

Sources: S.V.K., 1306/1889, p.267; S.V.K., 1310/1892, p.338; S.V.K., 1311/1893, p.120; S.V.K., 1312/1894, p.159; S.V.K., 1314/1896, p.128; M.S., 1316/1898, p.1128; S.V.K., 1317/1899, p.150; M.S., 1318/1900, p.1486; M.S., 1319/1901, p.735; S.V.K., 1321/1903, p.164.

Table 13

Kastamonu Military Rüştiye School’s Curriculum and Teaching Staff

Courses	1889	1894	1898	1900	1903
Arabic	Celal and Sait Efendi	Celal and Hafız Sait Efendi	Ahmet Sait and Ömer Efendi	Ahmet Sait and Ömer Efendi	Ahmet Sait and Ömer Efendi
Persian	Şemsettin Efendi		Salih Zühtü Efendi	Salih Zühtü Efendi	Salih Zühtü Efendi
Islamic Calligraphy	Lütfi Efendi	Lütfi Efendi	Hafız Lütfi	Hafız Lütfi	Hafız Lütfi

			Efendi	Efendi	Efendi
Turkish	Lütfi Efendi				
Ortography	Sadık Vicdani	Sadık Vicdani Efendi	Ahmet Faik Efendi	Ahmet Faik Efendi	Ahmet Faik Efendi
Riyaziye (Mathematics)	İzzet Efendi	İzzet Efendi	İzzet Efendi	İzzet Efendi	İsmail Hakkı and Eyüp Sabri Efendi
French	Nuri Efendi	Kadri Efendi	Kemal Efendi	Kemal Efendi	Kemal Efendi
Geography	Yakup Ef.	Yakup Efendi	Yakup Efendi	Yakup Efendi	Yakup Efendi
Painting	Ahmet Efendi	Ahmet Efendi	Hasan Efendi	Hasan Efendi	Hasan Efendi
Kavaid-i Osmani (Ottoman Language/Grammar)		Ömer Efendi	Ahmet Ziya Efendi	Ahmet Ziya Efendi	Hacı Ziya Efendi
İlmihal (Ethics)		Ömer Efendi	Ahmet Ziya Efendi	Ahmet Ziya Efendi	Lütfi Efendi

Sources: S.V.K., 1306/1889, p.267; S.V.K., 1312/1894, p.159; M.S., 1316/1898, p.1128; M.S., 1318/1900, p.1486; S.V.K., 1321/1903, p.164.

When the school's curriculum were analyzed, it was observed that in addition to basic military knowledge, different courses were offered, which contributed to the well-rounded education of the students. The table below shows the number of students in Kastamonu Military Rüştiye School.

Table 14

Number of Students in the Kastamonu Military Rüştiye School

Years	1889	1892	1893	1894	1896	1898	1899	1900	1901	1903
First Grade	24			47	40		40			44
Second Grade	42			67	49		38			41
Third Grade	32			47	45		35			16
Fourth Grade	27			25	23		35			15
Total	125	180	180	186	157	141	148	315	120	116

Sources: S.V.K., 1306/1889, p.267; S.V.K., 1310/1892, p.338; S.V.K., 1311/1893, p.120; S.V.K., 1312/1894, p.159; S.V.K., 1314/1896, p.128; M.S., 1316/1898, p.1128; S.V.K., 1317/1899, p.150; M.S., 1318/1900, p.1486; M.S., 1319/1901, p.735; S.V.K., 1321/1903, p.164.

There may be many reasons for the school's numerical changes over the years, both in terms of class size and total number of students. Among these reasons are economic difficulties, the war conditions in the state, and the state's inability to meet the supply-demand balance in education in a spatial sense. The decrease in the student population of the school in 1900 and 1901 compared to the previous years can be evaluated in parallel with the reasons mentioned above.

Discussion and Results

The Ottoman State maintained the institutional structures of the traditional eras by adapting them to the conditions of the period, with the principle of implementing the innovations of the day in the institutional sense within the political life of the Ottoman State. Educational institutions are one of the structures to which the Ottoman State attached importance. Just as every political element that believes in the importance of primary education, the Ottoman State also attached importance to primary education. The sıbyan schools, which were a part of the Islamic educational tradition, constituted the first stage of the transition to madrasah education and were schools where the individual acquired basic cognitive knowledge together with the practical stages.

The Ottoman Empire, which did not change the traditional structure except for military education institutions until the Tanzimat period, accelerated the modernization efforts initiated by Mahmut II in the field of education in order to adapt to the modern age. As a matter of fact, initially, the sıbyan schools started to transform into an institutional structure, and then primary education was given a new meaning with the iptidai schools. The fact that the sıbyan schools operated under the Ministry of Evkaf became a problem for the policy makers who aimed to carry out educational activities under the umbrella of the Ministry of Education. In order to overcome this situation, iptidai schools were established. Towards the end of the Tanzimat period, structural innovations were considered for iptidai schools, the number of which began to increase rapidly in the provinces, and iptidai schools became the basic dynamics of basic education together with rüştiyes, which had already acquired an organisational structure. The change and transformation activities in education in the Sublime Porte began to take shape in the provinces as well. Kastamonu Province, one of the important provinces of Anatolia, was also positively affected by this change. In the Tanzimat and post-Tanzimat period, when the enrolment rate increased, the enrolment rate also accelerated in the province of Kastamonu. In this study, this case was attempted to be revealed with numerical data. Considering the scope of the study, there are other studies that examine the educational activities of the period. Işık & Çevik's study (2022) provides introductory information about the schools in the province along with other districts. However, when our study is compared to this study, there are differences in terms of sharing the data presented in detail and examining the basic educational institutions in the provincial center. Kaya's (2018) study also sheds light on educational institutions in the city center of Kastamonu. However, secondary education institutions were also examined in this study.

Based on the data used in the study, it can be said that the number of iptidais was intended to be gradually increased alongside the sıbyan schools. Especially the fact that the public personnel needed by the state would be met from these schools can facilitate the explanation of this situation. The fact that the number of students in Hepkebirler Girls' Primary School and Girls' Rüştiye School is not insignificant at all shows the importance given by the people of Kastamonu to the education of girls. In addition, the public interest in the graduation ceremony of the Girls' Rüştiye School mentioned in the study may support this idea. The Military School opened in the provincial centre may be important for the children of the region to adopt military service and contribute to the defence of the country. The basic education institutions operating in the provincial centre of Kastamonu contributed to the development of the country's wisdom with the localisation of education that prioritised modernisation through standard curriculum practices and teacher staff.

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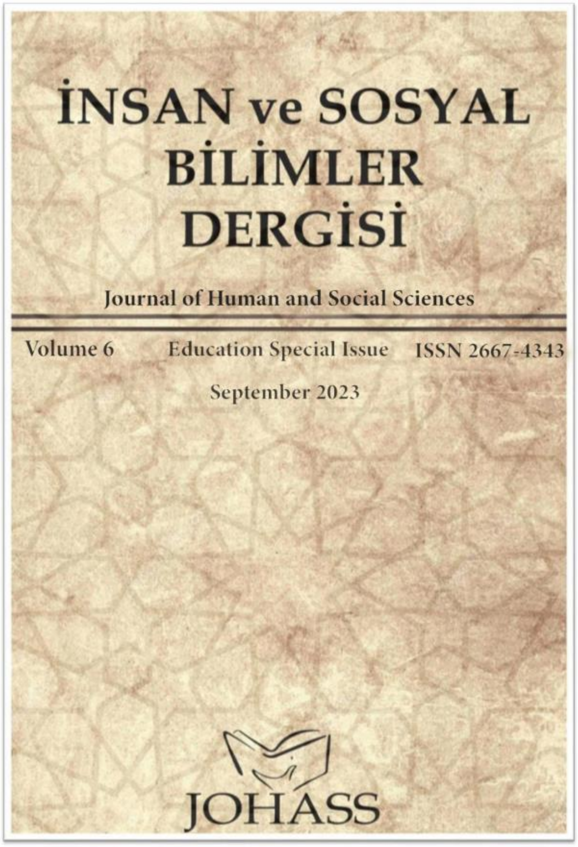

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A Comparative Study on the Semi-Presidential Government System: The Cases of the Russian Federation and Post-Communist Poland

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A Comparative Study on the Semi-Presidential Government System: The Cases of the Russian Federation and Post-Communist Poland

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Abstract **Research Article**

According to the widely accepted view, the existence of a government accountable to the parliament and a head of state elected by the people and endowed with powerful powers is sufficient to define the system as semi-presidential. However, although there are many unique definitions and qualifications in itself, it is not possible to talk about the existence of a uniform semi-presidential system. The reason for this is that countries interpret the government system within the framework of their own political culture and administrative tradition. Therefore, government systems are not typical models and can take different forms within the states' own administrative traditions. In this direction, in this study, the semi-presidential model of the Russian Federation and the semi-presidential model of post-communist Poland will be examined comparatively. Making a comparative study on the semi-presidential government systems of Poland and Russia will not be a comparison only in terms of revealing the differences, as it is thought. This study aims to make a contribution to the studies of the government system by comparing the states of Poland and Russia, which use the semi-presidential government system in a unique way. In addition, the main purpose of this study is to reveal that each country interprets the system of government it uses within the framework of its tradition of governance and political cultures.

Keywords: System of government, semi-presidential system, semi-presidential in Poland, semi-presidential in the Russian Federation

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Introduction

A semi-presidential system is usually characterized as a hybrid of a parliamentary and presidential system. Because of this characterization, one cannot speak of a uniform semi-presidential system. In fact, while the system functions in different ways in different countries, it is sometimes close to a parliamentary system and sometimes close to a presidential system. The reason why there are differences in the implementation of the semi-presidential system is that countries have different political cultures and administrative traditions. Indeed, in countries with a more democratic and constitutionalist tradition of governance, the system operates closer to a parliamentary system, while in countries with a more authoritarian tradition of governance, it operates closer to a strict presidential system. From this point of view, it may be interesting to examine the government systems of two countries such as Russia and Poland, which use semi-presidential systems but have differences in their functioning and have different traditions of governance, through a comparative analysis.

Sharing a common communist past, Russia and Poland also share a common characteristic in that they have undergone administrative transformation to overcome the negative effects of the communist order. In order to erase the traces of the post-1989 Soviet order, both countries wanted to move from a rigid order to a more democratic one, in an administrative transformation that swept all Central and Eastern European countries. After the collapse of the Warsaw Pact, both Poland and Russia opted for a semi-presidential system of government in their new constitutions to establish democratic values in their countries. In this period, the semi-presidential system was a method used by the former Soviet countries to strengthen the executive against the legislature. As a matter of fact, countries have resorted to this system of government during periods of instability.

Poland and Russia interpret the system differently as they represent different political cultures and administrative traditions. It is therefore interesting to examine how both countries have adapted the semi-presidential system of government in their state traditions. Accordingly, the aim of this study is to analyze the governmental systems of Poland and Russia in a comparative manner with a special focus on the semi-presidential system. Thus, this study is expected to contribute to the literature by showing that having different political cultures and administrative traditions can cause differences in the way the government system functions.

In this context, the study consists of four parts. In the first part, general information about the semi-presidential system of government will be given. In the second and third chapters, Poland's and Russia's semi-presidential systems will be explained by taking the legislative and executive branches as criteria, and the judiciary will be excluded from the study since it is considered to have no impact on the system. In the last part of the study, a comparative evaluation of the semi-presidential systems in both countries will be made. Although this is a qualitative study, the data obtained will be analyzed comparatively.

1. General Information on the Semi-Presidential Government System

The semi-presidential government system, which is one of the democratic systems to rule a country, combines the qualities of the presidential system and the parliamentary system at the same time. The French political scientist Maurice Duverger used the term semi-presidential for the first time (Ataöv, 2011; Polater, 2014). Although the Weimar Constitution and the Constitution of Finland were the first constitutions to envisage a semi-presidential model, it was France that made it remarkable (Yüzbaşı, 2014). Duverger defines the system based on the following three elements; (1) the President is elected by the people (2) the Prime Minister and the Council of Ministers, who exercise the executive power, remain in office as long as they do not oppose the parliament (3) the President is equipped with strong powers (Duverger, 1980; Yıldız, 2014). In order for the system to be defined as semi-presidential, in addition to the popularly elected President being endowed with strong powers, the existence of a government formed with the support of both the parliament and the president is also required.

The main characteristics of a semi-presidential system are a dual executive authority, a soft separation of powers, a bicameral structure of legialature, the existence of a check and balance mechanism and the potential for political instability. The executive aouthority is composed of a President, who represents the country at the international level and is elected by popular vote, and the government, which is responsible to the parliament and produces policies (Erdoğan, 2010). Countries using the system usually have a legislature with two chambers. In a semi-presidential system, the soft separation of powers functions smoothly. So much so that while the executive authority can intervene in the legislative agenda through draft laws, members of the government such as prime minister or ministers can be also members of the legislature. Additionally, in the system each organ of the state can limit the powers of the others, thus creating a system of balance by preventing the strengthening of one authority beyond others. However, as a disadvantage of the system, if the president and the prime minister are from different political parties, the situation can lead to political instability.

Executive branches: The dual executive in a semi-presidential system has a popularly elected President on one side and a parliamentary elected government on the other. While the President, who is the main power to govern, is responsible to the people who elected him, he is not accountable to the parliament and can dissolve it. In contrast, the government, which is accountable to the parliament, takes office with a vote of confidence and leaves office with a vote of no confidence. The members of the government, consisting of the prime minister and ministers, are elected and can be dismissed by the parliament. Here, the President is the irresponsible wing, while the government has political responsibility (Zirjawi, 2017; Aydın & Kösecik, 2016).

As can be seen, in a semi-presidential system, there are two key executive chairs: the President and the Prime Minister. The roles and responsibilities of these two executives who share the executive power, in other words, the functioning of the system varies depending on various dynamics such as the specific administrative tradition, political culture and constitution of the countries. Within the system, some countries give more authority to the head of state, while others give more authority to the prime minister, bringing the system closer to a parliamentary or presidential system.

Legislative branch: In a semi-presidential system, the legislature is bicameral, with a national assembly and a senate. However, the legislature is elected by popular vote. While the National Assembly is composed of deputies elected from the whole country for a certain period of time, the Senate is composed of deputies elected according to the regional or state structure within a certain quota. The bicameral nature of the system here is likened to a presidential system. In addition, the national assembly has similar qualities to a parliamentary assembly in a parliamentary system. The legislative body has basic duties such as enacting laws, preparing budgets and making amendments to existing constitutional articles (Akıncı, 2016). The government can participate in the legislative work of the parliament, which consists of the national assembly and the senate, by proposing legislation. The draft law created by the council of ministers is presented by the prime minister and discussed as a priority (Yazıcı, 2011).

The Relationship between the Legislature and the Executive Authorities: In a semi-presidential system of government, the legislature and the executive authorities are based on mutual cooperation, because the system differs from the presidential system due to the cooperation of powers. However, the fact that the president, who is the head of the state, is directly elected by the people is similar to the presidential system. In addition, the existence of both the head of state and the council of ministers is considered a feature similar to the parliamentary system. However, the system differs from the parliamentary system in terms of democratic legitimacy. While the parliament is the sole source of legitimacy in the parliamentary system, the election of the president by the people in the semi-presidential system provides a double legitimacy (Gül vd., 2017).

In a semi-presidential system, the executive body is active in the legislature. As a matter of fact, the government can participate in the functioning of the parliament through draft laws, and the legislature can create laws under the influence of the executive. In addition to the executive's participation in the law-making process through draft laws, there may be interaction between both powers in the system on issues such as budget and international agreements. As mentioned before, since there is a soft separation of powers in the system, government members are also members of the legislature (Aydın & Kösecik, 2016).

There are some advantages and disadvantages attributed to the semi-presidential system. First, it is an advantage that the semi-presidential system does not have the rigid conditions of waiting for the expiration of the term of a president who has lost legitimacy, such as in a presidential system, by not removing him/her from office. A second advantage is that the dual executive structure allows for a culture of compromise. Indeed, the fact that the President is in a more powerful position compared to the parliamentary system and has the power to dissolve the parliament, which even the US president does not have, forces the government to compromise and cooperate and prevents the emergence of unstable governments. Conversely, in countries where there is less culture of compromise, the fact that the head of state shares executive power with the government can create an environment of turmoil in case of possible disagreements on both sides and cause gridlock in the system. (Akıncı, 2016; Durkal & Karahöyük, 2017).

Another disadvantage attributed to the semi-presidential system is the risk of undermining the importance of the legislature when members of the government are also members of the legislature. As such, the legislature may be influenced by the government to enact laws. Another risk is that the intertwined nature of the legislature and the executive branches may make it difficult for the legislature to oversee the executive force. In addition, any crisis between the powers can be averted by means of a vote of confidence or dissolution and the existence of a senate elected by local governments have an important effect on the solution (Aydın & Kösecik, 2016).

As can be seen, the semi-presidential system bears the characteristics of neither a full parliamentary system nor a full presidential system. While the system differs from the presidential system in terms of having a two-headed executive structure, it also differs from the parliamentary system in that the executive authority is exercised by the head of state rather than the prime minister (Yüzbaşı, 2014). The semi-presidential system is considered a softer system compared to the presidential system. On the other hand, the division of executive authority between the President and the government causes the system to oscillate between parliamentary and presidential systems (Demir, 2013). Moreover, the system is considered closer to a presidential system if the President and the parliament are close in political thoughts, and closer to a parliamentary system if they are opposites (Zirjawi, 2017; Yüzbaşı, 2014). However, this system of government is more often seen as an alternative to an unstable presidential or parliamentary system.

Not every system may show similar results in every country. It may be misleading to say that a pure legislative-executive relationship represents a definitive system of government. Therefore, each system may have some advantages or disadvantages in each country. This is because countries have different political, economic, social and administrative backgrounds. Although the semi-presidential system is mostly associated with France, there are many different applications of the system in countries with different political cultures and administrative traditions.

In this part of the study, the qualities of the semi-presidential system in Poland and Russia will be discussed by focusing on the legislative and executive powers on both countries. The judiciary will be excluded from the study since it is assumed that judicial independence will exist in all countries as long as the democratic structure is preserved.

2. Semi-Presidential System in the Republic of Poland

Throughout its history, Poland has experienced heavy occupations, its people were deprived of their lands for more than a century, and even disappeared from the stage of history for a short period. Although it regained its independence, this time it was occupied by the Nazis and came under the rule of the Soviet Union after the Red Army attacked the Nazi army. Thus, Poland was ruled by a strict and authoritarian system under Soviet influence from the Second World War until 1989. With the collapse of the Soviet system in 1989, the administrative transformation in the Iron Curtain countries aimed to establish a similar democratic order. During this period, Poland, with the support of the European Union, drafted the 1997 Constitution,[1] which it uses today, thus attempting to erase Soviet influence from the country (Uğur & Doğan, 2017; Yücel, 2003).

The political and cultural history of the Poles, who belong to the Western Slavs, goes back to ancient times. The people, who established their first small state in 800-960, faced constant invasions due to their geographical location over the centuries. While in the 15th and 16th centuries it was a powerful state, towards the end of the 18th century it began to lose its power and came under the sovereignty of other countries. Poland was divided by Austria, Russia and Prussia between 1792-1795 and disappeared from the stage of history for a while. After this heavy collapse, it was only able to re-establish a state after the First World War (Uğur & Doğan, 2017).

After the Second World War, Poland signed the Warsaw Pact in its capital Warsaw and came under the influence of the Soviet Union, an order it had never experienced before. The country, which was ruled by the socialist system until the collapse of the Union, became the first Central and Eastern European country to break away from the Soviet Union after 1989. Poland took a different line in the Soviet order from other countries under the control/influence of the Soviet Union. This is because Poland has a democratic and constitutional administrative tradition. In fact, in 1791 Poland established the World's second and Europe's first written constitution, thus becoming the first state in Europe to use a constitution (Kutlu & Usta, 2013).

Poland's deep history of constitutional movements and its ability to recognize the importance of the constitution enabled it to adopt its written constitution in 1791, almost at the same time as the French (Uğur & Doğan, 2017). However, these early constitutional developments were perceived as a threat and were subject to a partition between Austria, Prussia and Russia, with Russia having the largest share between 1792 and 1795. After Russia's transform to Soviet Union, it’s desire to spread communism in Eastern Europe led to the delay of constitutional activities in the democratic sense in Poland (Yücel, 2011). Nevertheless, Poland's deep-rooted constitutional and democratic history has been seen as the reason why its transition from communist to democratic rule has been smoother than in other Soviet-influenced countries.

[1] The Copenhagen criteria of the European Union were influential in the drafting of Poland's 1997 Constitution and modern, democratic and pluralist values were adopted as a principle.

Another important development that supported the post-Soviet administrative transformation in Poland was the Round Table Talks. These talks, which shaped the Poland of today, took place between the Polish United Workers' Party (PZPR) and the Solidarity Group led by President Walesa. The aim of the talks was to create a more democratic administrative order based on the separation of powers. The result of these negotiations was the 1997 Constitution, which Poland uses today, and the country moved to a semi-presidential system, empowering the President within the system (Uğur & Doğan, 2017). In addition, the 1997 Constitution recognized the election of the President by the people and the election of the government from within the legislature. Thus, the President has become a position that derives its power from the people and is granted significant constitutional powers (Yücel, 2011).

Article 3 of the 1997 Constitution emphasizes the unitary structure and Article 10 the independence of the legislative, executive and judicial powers. Legislative power is vested in the National Assembly, executive power in the President and the Council of Ministers, and judicial power in the courts at the national level. Furthermore, the 1997 Constitution was drafted taking into account the European Charter of Local Self-Government. Accordingly, local governments are guaranteed in Chapter 7 of the Constitution (Çınar, 2013). The 1997 Constitution aims to get rid of the traces of the Soviet model. In this context, values such as democracy, liberal political tendencies, human rights and freedoms were prioritized (Candan, 2014).

Poland has a democratic parliamentary and constitutional background with its political culture and administrative tradition. Its semi-presidential system of government, shaped in line with these qualities, allows it to be considered more democratic among its peers. Another striking aspect of Poland's semi-presidential system is the balance of power between the president and the prime minister. Indeed, as will be detailed further, the powers of the president and the prime minister are distributed in a balanced manner in Poland, preventing each power from being symbolic or superior to the other (Elgie, 2005).

2.1. Executive Branches

According to the Constitution of the Republic of Poland, established by referendum in 1997, executive power is shared jointly by the President of the Republic (Office of the President) and the Council of Ministers.

2.1.1. President of the Republic

The 1997 Constitution recognized the popular election of the President[1] and the election of the government from within the legislature. The President of the Republic has thus become a position that derives its power from the people and has been granted considerable constitutional Powers (Yücel, 2011).

The President of the Republic, one of the parties to the executive power, is directly elected by the people through equal, universal and secret ballot for a term of 5 years, and may be re-elected for another term. Candidates for the presidential elections must be over 35 years of age and eligible to be voted for the Sejm. A two-round vote is envisaged in the presidential election. The candidates must receive more than half of the votes cast in the first round to be the president. If there is no winner in the first round, the two candidates with the highest number of votes go to the polls on the 14th day for the second round. This time the candidate with the highest number of votes is elected president (Candan, 2014; Article 127 of the Constitution of the Republic of Poland).

The President's main task is to represent his country in foreign policy, and he is also the commander-in-chief of the Polish armed forces and appoints the chief of staff and the force commanders. The President convenes and chairs the Council of Ministers on certain issues and is also authorized to issue regulations and decrees. The President, who is not accountable to the Parliament, can be tried in the Supreme Court for crimes committed or violations of the Constitution and laws (Kutlu & Usta, 2013).

The president, who derives his legitimacy from the people, is vested with significant constitutional powers. The President can dismiss the government or dismiss a minister who fails to obtain a vote of confidence from the Sejm. He can dismiss ministers at the request of the prime minister. He can also shorten the term of office of the Sejm after consulting the presidents of the Sejm and the Senate. It has the power to dissolve the legislature under the conditions set out in the Constitution. However, this does not apply in times of emergency. Before enacting a law, the President may submit it to a constitutional review. If the Constitutional Court decides that the law is constitutional, the President does not have the power of veto (Yücel, 2011).

The President can participate in the legislative process. He can, however, propose laws to amend the constitution. The President has the power to put the decision to a referendum if it is adopted by an absolute majority in a vote in the presence of Senators. The President of

[1] Chapter V of the Constitution of the Republic of Poland is devoted to information on the election, term of office, duties and powers of the President of the Republic of Poland.

Poland also has the power to declare martial law for a period not exceeding ninety days (Yücel, 2003). Although the Polish President is active in the system, he is less active than in the French model semi-presidential system. However, it is closer to the parliamentary system. Therefore, it can be said that the Polish President is stronger than in the parliamentary system and weaker than in the semi-presidential system.

2.1.2. Council of Ministers

Another wing of the executive power in Poland is the Council of Ministers.[1] The Council of Ministers, which shares this power with the President, consists of the Prime Minister and Ministers. The members of the Council of Ministers, who are responsible for Poland's domestic and foreign policy, are appointed by the Prime Minister with the authorization of the President. The Prime Minister supervises and coordinates the work of the Council of Ministers. The members of the Council of Ministers are collectively responsible to the Sejm. The Prime Minister can exercise executive power by obtaining a vote of confidence from the National Assembly (Senate and Sejm) within two weeks. Members of the Council of Ministers are tried before the Supreme Court for violations of the constitution and laws and for crimes committed in the course of their duties (Kutlu & Usta, 2013).

The Council of Ministers has the power to pass by-laws or make regulations. Legislative regulations are submitted by the government to parliament as draft laws. In addition, only the government can submit a budget bill. The President has the power to recommend the Prime Minister to the Sejm. In addition, the President appoints the Prime Minister and other members of the Council of Ministers. If the President's nominee fails to win a vote of confidence, the Sejm nominates the Prime Minister. The Sejm holds a vote of confidence in the newly appointed Cabinet. In the absence of a vote of no confidence, the President decides to renew the elections. A vote of no confidence can be cast against the Prime Minister or against an individual Minister (Candan, 2014).

[1] Chapter VI of the Constitution of the Republic of Poland is devoted to the Council of Ministers and State Administration.

2.2. Legislative Branch

The power to exercise legislative power in Poland is constitutionally vested in the National Assembly. The National Assembly consists of two wings, the Sejm and the Senate.[1] Therefore, all members of the Sejm and the Senate together constitute the National Assembly (Çınar, 2013). The Senate has one quarter of the number of members of the Sejm. Members of these two chambers are elected every 4 years by direct universal suffrage. A candidate cannot be nominated for the Senate and the Sejm in the same election. However, the Sejm is more powerful than the Senate (Çınar, 2004).

2.2.1. Sejm

Under the 1997 Constitution of the Republic of Poland, the Sejm is the traditional name for the effective wing of parliament. It has various checks on the Council of Ministers. However, it is the dominant element in law-making. The Sejm is composed of 460 deputies. Members are elected for a 4-year term in general, equal, secret and proportional elections. However, while the voting age for the Sejm is 18, the election age is 21 (Candan, 2014; Article 98-99 of the Constitution of the Republic of Poland).

One of the main powers of the Sejm is to make laws. Adopting the annual budget and national socio-economic plans is another of its powers. One of the important activities of the Sejm is to oversee the implementation of the laws or decisions it adopts. 15 members of parliament can ask questions written or verbally to members of the Council of Ministers on current issues. Another important task of the Sejm is to appoint the Prime Minister and the Council of Ministers. The Sejm makes important appointments to public institutions, sometimes with the approval of the Senate and sometimes with the proposal of the President. It also presides over the National Assembly and can declare a state of war and peace on behalf of the Republic of Poland (Zakrzewski, 1986).

2.2.2. Senate

The Senate is another branch of the legislature and consists of 100 senators elected by universal, direct and secret ballot for a 4-year term. To be eligible for election to the Senate, one must be over 30 years of age. The legislative term is the same as that of the Sejm. Therefore, when the Sejm goes to early elections, the Senate must also be re-elected. The Senate's primary power is to propose laws. In addition, it must review bills and proposals

[1] Chapter IV of the Constitution of the Republic of Poland provides information on the elections, term of office and functioning of the Sejm and the Senate.

received by the Sejm within 30 days and resubmit them to the Sejm.[1] The Senate has the right to adopt, amend or reject a piece of legislation. It can also authorize the President of the Republic to hold a referendum on certain issues. However, the Senate has no oversight power over the executive. In special cases provided for in the Constitution, the President of the Republic is deputized by the President of the Senate in the absence of the President of the Sejm (Candan, 2014).

In the absence of the Sejm president, the president of the Senate presides over the National Assembly. In the legislative process, the Sejm has an upper hand over the Senate. In law-making, the proposal passed by both chambers is submitted to the President of the Republic. The President signs the legislation within 21 days and sends it to the Official Gazette and the law thus enters into force. The President has the power to send the law back to the Sejm for reconsideration (Çınar, 2013).

3. Semi-Presidential System in the Russian Federation

Russian political history is usually divided into three periods: the Tsarist Period from the 18th century until the 1917 Revolution, the Union of Soviet Socialist Republics between 1917 and 1991, and the Russian Federation after the dissolution of the USSR in 1991. In this historical process, the 1993 Constitution, adopted after long struggles, established a semi-presidential system with strong powers of the President (Acar, 2016). Therefore, Russia adopted the semi-presidential system with the adoption of the 1993 Constitution. The reason for Russia's transition to this system can be explained as creating a strong executive branch and thus ensuring stability.

In Russia's political history, unlike in Poland, there is no popular demand for democracy. In fact, Russians have a history of being a local community, a closed commune. Until the 20th century, lacking an urban culture, the people lived as a village community and maintained the land administration and slave system of the Middle Ages. Having such a social tradition prevented the formation of an opposition among the people and the development of civil society as a requirement of democracy (Durkal & Karahöyük, 2017). Therefore, the Russian people have remained far away from civil society awareness compared to a European country. As a matter of fact, an oppressive and authoritarian order like the USSR also supported such a tradition of governance, and the order in which the public remained unresponsive to the authoritarian rule of the President continued.

[1] Within 14 days when there is an urgent law

Shugart divides the semi-presidential system into two as presidential-presidential and presidential-parliamentary systems. In this distinction, he characterizes Russia as a presidential-parliamentary system since the Prime Minister and the government are accountable to the parliament and the Head of State (Shugart, 2005). Russia's semi-presidential system of government represents more of a semi-presidential model with strong presidents. In such a semi-presidential model, the system operates more closely to a presidential system (Elgie, 2005). Indeed, since its creation in 1991, the Russian Federation has used a semi-presidential model similar to the presidential system. Moreover, it is sometimes characterized as "authoritarian presidential" or "super-presidential". (Dursun, 2006).

Throughout its history, Russia has a tradition of strong and authoritarian leadership. It can be said that this understanding is reflected in the 1993 Constitution and the system of government adopted by Russia. In the semi-presidential system of the Russian Federation, the head of state is closer to being characterized as an authoritarian president due to his unorthodox powers. Some argue that the presidency has been strengthened in Russia under this system adopted from France. In fact, the president can rule the country by decree (Durkal & Karahöyük, 2017; Roskin, 2013). Therefore, although Russia is classified as a semi-presidential system of government, it is closer to being characterized as an authoritarian presidential system in terms of the functioning of the system due to its political culture and tradition of governance.

3.1. Executive Branches

According to the 1993 Constitution of the Russian Federation, executive power is exercised jointly by the head of state and the government of the Russian Federation.

3.1.1. President of the State

Although the government of the Russian Federation is characterized as semi-presidential, it has a very powerful head of state. The head of state, the President of the Russian Federation[1] is elected by the people in general elections for a term of 6 years. [2] The President cannot be younger than 35 years. However, he/she must have been a resident of

[1] Chapter Four of the Constitution of the Russian Federation is devoted to information on the election, term of office, duties and powers of the President.

[2] With the 2008 amendment, the term of office was extended from 4 to 6 years. In this way, the head of state has been strengthened.

Russia for more than 10 years (Constitution of the Russian Federation, Article 81; Durkal & Karahöyük, 2017). The candidate who receives more than 50% of the valid votes shall be elected president. If this majority is not achieved in the first round, the candidate who receives the highest number of votes among the two candidates with the highest number of votes in the second round is elected president. The 1993 Constitution grants the elected Head of State extensive powers in various areas such as legislative, executive, judicial and national security (Candan, 2014). In line with what the Constitution states, such a system places the head of state in a supra-powerful position, not only as an element of the executive branch.

The President has the power to appoint the Prime Minister, subject to approval by the Duma. If the Duma rejects the Prime Minister candidate proposed by the President three times, the President can dissolve the Duma. The approval requirement is therefore not functional. The President, who requires the approval of the Duma when appointing the Prime Minister, does not need approval for ministers and deputy prime ministers (Acar, 2016). The President, who protects Russia's independence, is the commander-in-chief of the armed forces. He has the authority to declare martial law and a state of emergency when the country faces any threat. In addition, the head of state is responsible for the harmonious functioning of the organs of the state. He is responsible for ensuring reconciliation between the state organs of the Federation and the state organs of the federation (Candan, 2014; Constitution of the Russian Federation, Articles 83-90).

The Head of State is inviolable but has no political responsibility. The people or any other power cannot remove the President from office even if they do not like his or her policies. However, the Head of State is accountable to the legislature in any matter related to his/her office or when accused of treason (Durkal & Karahöyük, 2017). The most important legislative duty of the Head of State is the power to propose laws. He is also authorized to return a draft law to the Federal Assembly within 14 days. When the President vetoes a law, the Federal Assembly has two ways to overcome the veto, either by overriding the veto by a two-thirds majority of the total number of members of both chambers or by involving the President more in the legislative process. The Constitution gives the President the right to dissolve the State Duma (Acar, 2016). For these reasons, the parliament is considered to be relatively weak vis-à-vis the president in Russia (Dursun, 2006).

3.1.2. The Government of the Russian Federation

In Russia, executive power is exercised by the Government of the Russian Federation.[1] The Government consists of the Head of Government of the Russian Federation, vice-presidents, federal ministers and heads of institutions (Constitution of the Russian Federation, Article 110). The Head of Government is appointed by the President with the approval of the State Duma. The appointed Head of Government must submit the names of the vice-presidents and federal ministers to the President within one week (Article 111 of the Constitution of the Russian Federation). In the relationship between the government and the Head of State, if the decisions of the government contradict the decisions of the Head of State, the attitude of the Head of State is decisive (Çınar, 2013). In line with what has been explained so far, it can be said that there is no government as the determinant of domestic and foreign policy in Russia. As a matter of fact, state policy is mostly determined by the President. The Russian government is the executor of the decisions taken rather than making important decisions.

3.2. Legislative Branch

The Russian Federation has a bicameral parliament. The lower house is the State Duma and the upper house is the Federation Council (Roskin, 2013).

3.2.1. State Duma

The State Duma consists of 450 members elected for 5 years. Any citizen of the Russian Federation over 21 years of age can be elected as a member of the State Duma (Constitution of the Russian Federation, Articles 95-97). Law proposals are first discussed in the State Duma. If adopted by a simple majority, they are sent to the Federation Council within 5 days. From there, it is submitted to the President for approval (Durkal & Karahöyük, 2017). Duma members enjoy immunity during their term of office. Half of the members are elected according to the proportional representation system based on party lists and the other half according to the one-name majority system. It is forbidden for a person to be a member of both the State Duma and the Federation Council at the same time. The constitutional duties of the Duma are to approve the President of the Republic on the appointment of the Head of Government, to give a vote of confidence to the government, to discuss annual reports on the

[1] The Constitution of the Russian Federation devotes Chapter Six to the Government of the Russian Federation.

results of the government's activities and to declare a general amnesty (Candan, 2014; Constitution of the Russian Federation, Article 103).

3.2.2. Federation Council

The upper house of the federal parliament, the Federation Council, is composed of one representative each from the executive and legislative branches of the 85 federal entities. The federal states are represented in the Federation Council. Although there is no exact number of the Council,[1] It has 178 members, with 2 members from each of the 85 federal entities and 8 senators appointed by the President of the Republic. Proposals for legislation considered by the Federation Council are submitted to the Head of State for approval (Durkal ve Karahöyük, 2017). In general, the Federation Council is competent to adopt changes in the boundaries between the federating units, to adopt the President's decision to declare martial law and a state of emergency, to approve the use of the armed forces abroad, to announce the election of the President, and to appoint members of the Constitutional Court and the Supreme Court (Constitution of the Russian Federation, Article 102).

4. A Comparative Evaluation of the Semi-Presidential Government Systems of the Republic of Poland and the Russian Federation

When we look at the studies conducted in this field, it is generally seen that France, where the semi-presidential system emerged, is compared with any of the countries using this system. However, there is no direct comparative study of the government systems of Russia and Poland, which use the system in a unique way within their own state traditions. The semi-presidential system of government is a system of government that combines the features of both parliamentary and presidential systems. Both Russia and Poland have implemented the system outside the typical French model. As a matter of fact, Poland uses a semi-presidential model with more parliamentary characteristics, while Russia uses a semi-presidential model close to a strict presidential system.

Duverger, who introduced the concept of semi-presidentialism and defined the system, states that the countries that started to use this system of government are generally the countries affected by the third wave of democracy. According to another view, countries that want to adopt a semi-presidential system do so because they want to overcome their political crises or because they need to democratize rapidly. These views may also be valid for Russia

[1] Due to changes in the number of federal districts

and Poland, which want to erase the negative consequences of the Soviet Union from their countries. As a matter of fact, the first thing that both countries aimed for when they switched to a semi-presidential system was to strengthen their executive branch compared to the previous period.

Both countries adopted the semi-presidential system of government in their recent constitutions, taking France as a model. The main feature of the semi-presidential system is not only that the President is elected by the people, but also that the President must be endowed with very powerful powers. In this respect alone, Russia may appear to be closer to the system, but this is not enough. Poland has a strong President, but the Polish President does not have as much power as the Russian President.

After the collapse of the Warsaw Pact, Poland and Russia sought to strengthen their executive by adopting a new system on the wave of democratization. Both countries have popularly elected heads of state, but with different terms of office. The Polish President serves for a 5-year term, while the Russian President serves for 6 years. In addition, the President of both countries can be elected for two consecutive terms. In order to be elected President in both countries, one must be over 35 years of age. In addition, both Russia and Poland envisage two rounds of voting for the election of the Head of State.

Unlike Poland's 1997 Constitution, Russia's 1993 constitution adopts a semi-presidential model with strong powers of the President. In contrast to the President of the Republic of Poland, the President of the Russian Federation is very influential in the executive branch in a way that can be called the sole power. The Russian President has more powers than the government. While the government is not in a position to determine domestic and foreign policy, the President determines the policies. Therefore, the Government of the Russian Federation is more of a decision-maker than a decision-executor. This is not the case in Poland. This is because, although the 1997 Constitution gives the President some powers, he is not powerful vis-à-vis the Prime Minister. While the Russian President is supreme, the Polish President does not have a superior position over the executive. Therefore, while in Poland there is a balance of powers, in Russia the fact that the President is above the executive rather than being an element of it may undermine the principle of separation of powers.

Another difference between the Polish and Russian systems of government is that in both countries, the President has veto and dissolution rights within the executive branch, but this is stronger in Russia. In addition, another important difference is that in Russia, the

President is untouchable and has no political responsibility. In Poland, on the other hand, the President does not have such a sharp immunity. This is because in Russia, a strong mechanism to remove a President who is not successful is not easily established.

Looking at the political history of the two countries, their administrative traditions have been effective in their interpretation of the semi-presidential system in terms of their own traditions. Indeed, the strengthening of the head of state in countries using the semi-presidential system poses the danger of the personalization of power. When we compare the two countries in this respect, it is clear that Poland, coming from a more democratic administrative tradition compared to Russia, interprets this system differently. In fact, the Russian President has superior powers compared to the Polish President. It is not uncommon for the Russian President to issue a decree and propose legislation in a field that is not regulated by law, which is not the case for the Polish President. Therefore, while Russia has a powerful Head of State vis-à-vis the legislature, this is not the case in Poland. In this respect, it can be said that the democratic drawbacks of semi-presidentialism have been relatively eliminated in Poland compared to Russia.

Another characteristic of the semi-presidential system, "bicameralism or bicameralism", is observed in both countries. Both Poland and Russia have a two-headed structure with a lower house and an upper house. However, there is a difference in terms of the number of members. While the Polish upper house has 460 members, the Russian parliament consists of 450 members. The lower house consists of 100 members in Poland and 187 members in Russia. Considering the population of both countries, it can be said that Poland, with a population of 40 thousand, is more democratic in terms of representation. In both countries, it is forbidden for one person to be a member of two parliaments. In addition, the term of office of both parliaments in Poland is 4 years, while in Russia it is 5 years. Finally, the Russian President requires the approval of the Duma when appointing the Prime Minister, but not when appointing ministers and deputy prime ministers. In Poland, the President needs the approval of the Sejm when appointing the Prime Minister and ministers.

At the end of these assessments, it can be concluded that Poland has adopted a more balanced semi-presidential system and Russia a more authoritarian semi-presidential system. This is because both countries come from different administrative traditions and political cultures. As a matter of fact, Russia has created a strong Presidential office under the influence of its political history. Accordingly, it can be said that Russia has a more centralized and rigid structure. On the contrary, Poland, which has a more liberal, democratic and constitutionalist background, does not position the President in a strong structure even above the executive. Thus, it can be said that Poland uses a parliamentary system and Russia uses a semi-presidential system that is closer to the presidential system. Another conclusion that can be drawn is based on the state structures of both countries. While Poland is a unitary state with regions, Russia has a federal structure. Therefore, Russia may need a strong presidency to keep the federal structure together.

Discussion and Results

The semi-presidential system of government has been the preferred choice of many countries, especially Central and Eastern European countries, especially after the dissolution of the Soviet Union. This is due to the need to get rid of the influence of the rigid, authoritarian and oppressive Soviet order and to quickly establish a constitutional and democratic order. Both Poland and Russia wanted to establish democratic values in their countries after the collapse of the Warsaw Pact and opted for a semi-presidential system of government with their new constitutions. Maurice Duverger, the theorist of the semi-presidential system, believes that the system is generally a product of the former Soviet countries' efforts to transition to democratic order after the collapse of the communist order. As a matter of fact, Russia and Poland, which are within the scope of the study, adopted the semi-presidential system by taking the French system as an example with their constitutions drafted in 1993 and 1997.

Government systems are formed when countries organize their legislative, executive and judicial organs in different ways within the framework of their political culture and administrative tradition in the historical process. Therefore, the main determinant of government systems is how these organs are organized. However, it is seen that countries interpret government systems differently depending on many different variables, especially their political regime, political culture and administrative tradition. For this reason, it can be said that the semi-presidential system of government within the scope of this study functions in different ways in countries with different qualities.

In the study, first of all, the general characteristics of the semi-presidential system of government are tried to be explained. Duverger was the first to use the concept in the literature. However, many different definitions of semi-presidential system have been made based on Duverger's definition. The common opinion is that this system is somewhere between the presidential system and the parliamentary system, and sometimes the weight shifts to one side or the other. The current political and administrative conditions of the countries determine which side the weight will be on. There are differences between Poland, which has a liberal and constitutionalist tradition, and Russia, which has a repressive and authoritarian administrative history. It can be said that the Russian people have historically chosen a political power that is balanced against democracy or a powerful leader as a state tradition. The Polish people, on the contrary, prioritized democratic criteria.

When Poland and Russia are compared within the scope of the semi-presidential system of government, it is seen that both countries switched to this system in order to get rid of the political chaos and instability they were experiencing. As a matter of fact, while in Russia this led to the establishment of a system closer to an authoritarian presidential regime, in Poland it led to the establishment of a system stronger than the parliamentary system but weaker than the presidential system. This difference in usage between the two countries can be explained by the fact that constitutionalist practice in Poland goes back further than in Russia. Poland has a relatively democratic history to be proud of, having produced the first written constitution in Europe. Therefore, it has rapidly achieved its democratization by emerging from all authoritarian and oppressive conditions brought about by history on a constitutional basis. Compared to Poland, Russia's history consists of periods of strong centralization of power and unresponsiveness of the people against authoritarian governments.

As a result, mainly due to the influence of the tradition of governance, an authoritarian tradition in Russia led to a more powerful presidential office, while a more constitutional and democratic tradition in Poland led to a President with more balanced power. Therefore, the most obvious difference between them is that the Russian president has strong powers, while Poland has a more powerful president compared to the parliamentary system, but a weaker president compared to the semi-presidential system. Addionally, when both state traditions were overlaid with a system that empowered the head of state, such as a semi-presidential system of government, the appearance of the head of state was authoritarian and personalized in Russia, while in Poland it was a head of state who exercised more balanced power. Finally, when we look at the comparison of the government systems of both countries in terms of the impact of unitary and federal state forms on the system, it can be assessed that Russia, which has a federal structure, needs a strong presidency to keep this structure together. Therefore, although Russia is officially referred to as semi-presidential, it has a functioning that can be characterized as presidential or even super-presidential.

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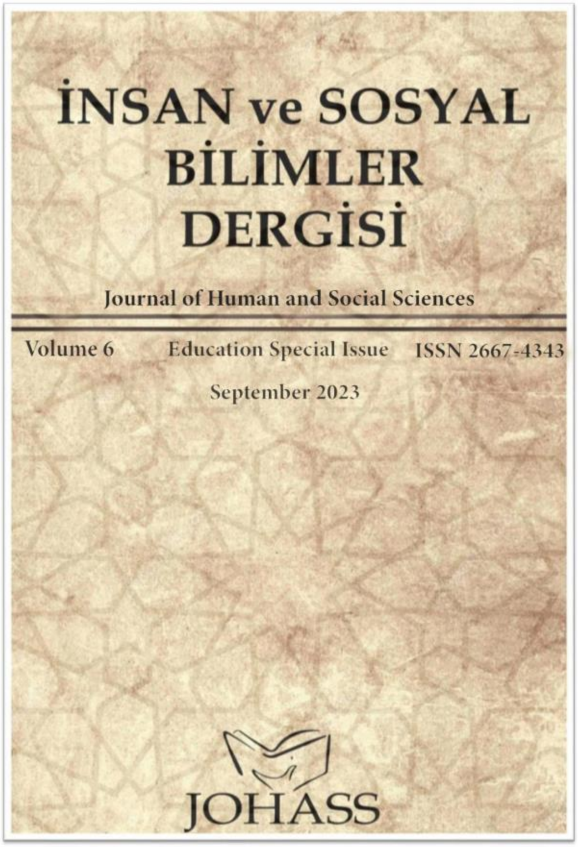

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Multicultural Education in Türkiye: A Systematic Review

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Multicultural Education in Türkiye: A Systematic Review

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Research Article

Abstract

Global migratory movements have recently increased dramatically due to conflict, economic challenges, and health crises. Consequently, multiculturalism has gained prominence, necessitating the introduction of multicultural education in educational institutions. This change, in turn, has led to increased research studies on multicultural education. The main objective of this study is to provide a comprehensive systematic review of research on multicultural education in Türkiye. Within this framework, the study examined the prevailing research trends, methods, focus areas, measurement instruments used, participant groups, and outcomes described in articles on multicultural education in the Turkish context. To analyze the research data, a thorough examination of the articles published in the index TR between 2013 and 2023 was conducted. The resulting data were carefully analyzed using the descriptive content analysis method. The study results show that the number of research papers on multicultural education has increased significantly in recent years. Qualitative research methods were preferred in these studies, while scales stood out as the primary instruments for data collection. In addition, the study found that the majority of participants in these studies were educators, particularly teachers. In addition, a significant portion of the articles were published in social studies. It was also found that the predominant variables in these studies were attitude and gender, with a positive change in participants' perceptions of multiculturalism. By comprehensively assessing these facets, the study contributes to our understanding of the dynamics and trends in multicultural education research in Türkiye.

Keywords: Multicultural education, multiculturalism, social value

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Introduction

Throughout history, epidemics, natural disasters, and conflicts have driven human migration to foreign lands. These unfortunate circumstances have sometimes compelled individuals to share their lives with people from different cultural backgrounds, either out of necessity or in pursuit of personal betterment. However, with globalization and advancements in transportation technology, we have witnessed the emergence of multinational states and the transformation of existing states into multicultural societies. These developments have facilitated communication among diverse cultures and encouraged the exchange of ideas and values. Consequently, multiculturalism has gained prominence to promote the peaceful coexistence of various cultural communities within the public sphere (Rdodoplu, 2020).

Multiculturalism holds significant implications, influencing various domains such as education, state policies, citizenship, employment, and media (Çelik, 2008). Its origins can be traced back to the 1970s when countries like Australia and Canada initially embraced it to celebrate the diversity of indigenous populations and immigrants. Over subsequent decades, it expanded to English-speaking nations like the United States, the United Kingdom, and New Zealand, gradually spreading to other parts of Europe (Doytcheva, 2009). However, the reception of multiculturalism has been mixed, with some nations welcoming it enthusiastically while others remain skeptical (Rdodoplu, 2020).

One fundamental approach to fostering harmonious coexistence among individuals from diverse backgrounds is through multicultural education provided to school students. Unlike traditional educational models that produce individuals rooted in a single culture, multicultural education aims to cultivate individuals who deeply appreciate diverse cultures, offer equal development opportunities, and demonstrate sensitivity to various cultural backgrounds (Polat & Kılıç, 2013). Multicultural societies have profoundly influenced educational practices, giving rise to multicultural education. Banks et al. (2001) define multicultural education as a reform and process ensuring equal educational opportunities for all students, regardless of race, gender, socioeconomic status, or ethnic origin.

In the research literature, the bibliometric analysis method is a systematic review tool that quantitatively assesses the publications within a specific academic discipline or field (Çalık & Sözbilir, 2014). Bibliometrics, through its analysis of various aspects of publications within a field, plays a pivotal role in identifying trends and patterns. By conducting comprehensive bibliometric studies, researchers can gain valuable insights into gaps and disparities within the research domain (Polat, 2013). Independent studies within the same field may yield divergent results, underscoring the significance of bibliometric studies in aggregating, selecting, synthesizing, organizing, and summarizing research outcomes. Consequently, a well-executed bibliometric study offers researchers a rich source of information conveniently consolidated in one accessible location.

An extensive review of the existing literature on multicultural education has revealed a noticeable lack of bibliometric studies within this field. Because there is no bibliometric research and multicultural education in the literature, the present study will fill a gap in the multicultural education field. To the author's knowledge, no study has a bibliometric analysis of research on multicultural education. The lack of bibliometric research in multicultural education addresses an important research gap in the literature. Furthermore, only two studies related to bibliographic and multicultural studies are closely parallel to the present study. For example, Cabrera et al. (2019) conducted a bibliometric study to analyze nine highly published studies concerning ethnic and racial bullying. Their findings revealed the important physical and psychological challenges faced by young individuals who experienced ethnic and racial bullying. In a more recent study, Wu et al. (2022) conducted a bibliometric analysis focused on the impact of electronic data interchange (EDI) on culture within English-speaking countries, utilizing data from the Web of Science database. This study revealed that EDI harmed national identity and indigeneity. However, the studies of Cabrera et al. (2019) and Wu et al. (2022) are not related to multicultural education, and they have not conducted a comprehensive bibliometric analysis of articles related to multicultural education in the field of education. With this aspect, research gaps are clear in conducting bibliometric research on multicultural education.

In the literature review, we could not identify any studies where a systematic analysis of both national and international literature had been conducted. Consequently, there is a pressing need for research involving bibliometric analysis within the field of multicultural education. This study, therefore, aims to undertake a bibliometric analysis of documents related to multicultural education in the Web of Science database. The findings of this research can serve as an initial reference point for scholars and can also strengthen future research endeavors, thereby fostering further initiatives and research in the field of multicultural education. Recognizing the importance of this contribution, the research results have the potential to enhance the knowledge base of researchers engaged in multicultural education, uncover research gaps that have emerged from existing studies, and provide valuable insights for policymakers and curriculum developers in the realm of multicultural education.

As a result, the research problem is defined as follows: 'What is the distribution of the examination of documents published on multicultural education in the Web of Science database in terms of various variables?' Within the scope of this problem, we aimed to find answers to the following questions:

How are the documents on multicultural education distributed by publication year?

What research methods are utilized in these documents?

In which research areas do these documents fall?

What variables are commonly investigated in these studies?

What measurement tools are frequently employed?

What is the level of participants in these studies?

What are the outcomes and results derived from these studies?"

Method

Research Design

In this study, the document analysis method was employed. Document analysis entails the collection and review of various documents as the primary source of research data (Sak at al., 2021) It is a scientific research approach characterized by the processes of gathering, questioning, and analyzing information. To analyze the data, we utilized the descriptive content analysis method. Descriptive content analysis involves a thorough review and systematic categorization of quantitative and qualitative studies centered around a specific topic or field. This rigorous examination aims to uncover overarching trends within the subject matter, thereby facilitating the identification of common patterns. As defined by Çalık and Sözbilir (2014), descriptive content analysis involves the assessment and analysis of studies within a particular field to discern prevailing trends and research findings. This methodology comprehensively evaluates and categorizes existing literature pertaining to a specific topic (Çoban, 2022).

Document analysis studies serve a crucial role in guiding future research endeavors. Employing a qualitative analytical approach when scrutinizing the motivations, outcomes, and objectives of the studies examined through document analysis significantly contributes to the explanation and elaboration of these studies. The primary objective of document analysis studies is to provide researchers with insights into the prevailing trends within their chosen subject or field of study. Such studies typically involve the analysis of characteristics such as the year of publication, research methodology, field of study, study participants, and measurement tools used. In contrast to standardized document analysis studies, these investigations focus on unique areas of analysis (Ültay et al., 2021). In order to infuse originality into this research and examine the studies from an innovative perspective, this study offers an in-depth understanding of the research context by analyzing the outcomes and variables employed in these studies.

Data Collection

Researchers often utilize diverse databases tailored to each study in the descriptive content analysis method. For the present study, which focuses on scrutinizing multicultural education research in Türkiye, TRDizin was chosen as the database. TRDizin was selected due to its convenience in accessing Turkish-produced information and its recognition as an approved "directory" by the Council of Higher Education (YÖK) and the Interuniversity Council (ÜAK) for appointments and promotions. To search, the term "Multicultural Education" was inputted into the search function, and studies carried out within the past decade were reviewed. Since there were not enough studies in the field of multiculturalism before 2013, the year of 2013 was determined as the beginning of the review. This yielded a total of 67 articles. Subsequently, a meticulous examination was performed to exclude articles not directly related to multicultural education, leading to a final selection of 56 articles that met the predefined analysis criteria. The complete texts of these 56 articles were retrieved and downloaded. In order to ascertain the relevance and suitability of the downloaded articles, a second researcher with prior expertise in the field was consulted. In this study, the researcher assessed the suitability of the downloaded articles based on predetermined criteria. The reliability formula proposed by Miles and Huberman (1994) (Reliability = Agreement / (Agreement + Disagreement)) was employed for this evaluation. Following this assessment, the degree of agreement between the two researchers was computed, resulting in a consensus level of 89%. This meticulous process of article selection and verification underscores the precision and integrity of the data collection phase in the study.

Data Analysis

The researcher created a form that included the research year, purpose, outcome, research variable, research area, study group, measurement instruments, and research method criteria. Two different researchers meticulously evaluated this form. The two researchers coded the 56 articles selected for analysis. Microsoft Excel was used for data coding, and the specified codes were integrated into the Excel file. Initially, ten articles were coded separately to ensure consistency in coding. This resulted in a Cohen's Kappa analysis reliability of 0.91 between coders. Subsequently, the two coders coded the remaining articles, making a concerted effort to maintain reliability. Discrepancies in coding were discussed in detail, and consensus was reached between the coders to resolve these discrepancies. This rigorous process of double coding and resolving discrepancies ensures the robustness and accuracy of the data analysis.

Findings

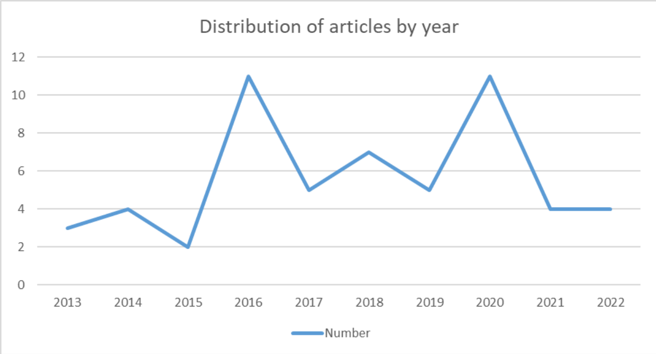
In this section of the study, the results of the research objectives and corresponding sub-problems are presented through figures and tables by the sequence of research issues. The interpretations of the findings extracted from each table and figure are provided below each visualization. This structured approach ensures a comprehensive and organized presentation of the research outcomes, enabling a clear understanding of the insights garnered from the study.

Distribution of Articles Acording to the Year of Publication

The distribution of the analyzed articles according to the year of publication is given in Figure 1.

Figure 1

Distribution of Articles on Multicultural Education According to Years of Publication



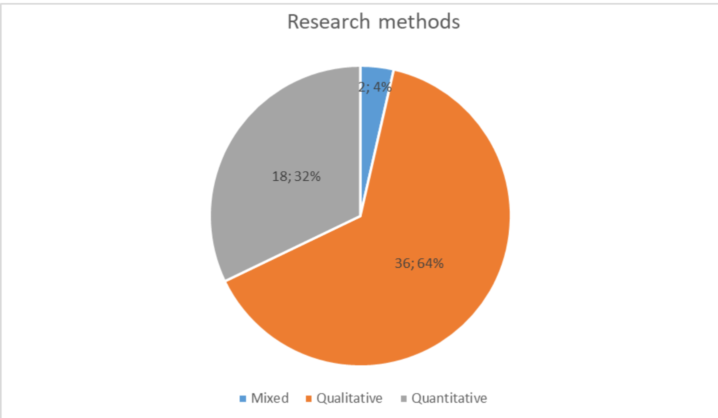
Upon reviewing Figure 1, which illustrates the distribution of articles on multicultural education over the years, a distinct pattern emerges. 2016 and 2020 are the most prolific periods for research endeavors in this domain. Among the studies conducted between 2013 and 2022, 2015 witnessed the least number of studies on multicultural education. This trend is corroborated by the data presented in Table 1, which indicates an uptick in the number of studies conducted during the last five years compared to the preceding five years. This finding suggests a growing interest and emphasis on researching multicultural education in recent times, as evidenced by the increased volume of studies in recent years.

Research Methods Used

Figure 2 demonstrates the distribution of the analyzed articles according to research methods.

Figure 2

Distribution of Articles on Multicultural Education by Methodology



A distinct pattern emerges after analyzing Figure 2, which presents the distribution of research methods utilized in the 56 articles on multicultural education. The majority, constituting sixty-four percent (36 articles), employed qualitative research methods. Meanwhile, thirty-two percent (18 articles) opted for quantitative research methods, while a smaller proportion of four percent (2 articles) utilized mixed research methods. This data shows that a substantial portion of the articles focused on multicultural education favors qualitative research approaches. While the utilization of mixed research methods has shown some growth in recent times, it remains apparent that their application within articles on multicultural education is still relatively limited. This observation underscores the prevalent preference for qualitative methodologies within this field.

Research Areas

Table 1 demonstrates the distribution of the analyzed articles according to the fields.

Table 1

Distribution of Articles on Multicultural Education by Fields

	Code	f	%
Fields	Social Studies Education	21	37,6
	Curriculum and Instruction	10	17,9
	Preschool Education	4	7,2
	Religious Culture and Ethics	2	3,5
	Foreign Language Education	6	10,7
	Sociology	1	1,8
	Education Management	3	5,3
	Classroom Management	6	10,8
	Mathematics Education	2	3,5
	Guidance and Psychological Education	1	1,7
	Total	56	100

Upon analyzing the 56 articles concerning multicultural education as presented in Table 1, a notable trend emerges across academic domains. The highest number of articles, constituting 37.6 percent (21 articles), focuses on social studies education. Educational programs and teaching emphasize social studies education, each accounting for 17.9 percent (10 articles), and foreign language education and classroom management at 10.7 percent. Conversely, when considering the articles on multicultural education, the domain with the least number of studies is guidance and psychological education, comprising only 1.7 percent

(1 article). Based on these observations, it is evident that the majority of studies predominantly fall within the verbal domain, with just two studies exploring multicultural education within the numerical domain of mathematics education. This distribution highlights the prevailing focus on verbal disciplines in exploring multicultural education.

Variables Researched

Table 2 demonstrates the distribution of the analyzed articles according to variables.

Table 2

Distribution of Articles on Multicultural Education According to Variables

	Code	f	%
Variables	Attitude	15	12,9
	Gender	16	13,7
	Contact	2	1,7
	Economic situation	6	5,2
	Branch	1	0,8
	Age	2	1,7
	Seniority	6	5,2
	Region	3	2,5
	Perspective	1	0,8
	Education status	8	6,9
	Chapter read	1	0,8
	Faith	12	10,2
	Cultural background	3	2,5
	Language	8	6,9
	Textbook	5	4,2
	Perception	7	5,9
	Self-efficacy	1	0,8
	Engaging with the lesson	1	0,8
	Understanding	1	0,8
	Race	5	4,2
	Family	1	0,8
	Equality	2	1,7
	Tolerance	1	0,8
	Respect	1	0,8
	Help	1	0,8
	Success	1	0,8
	Democracy	1	0,8
	School type	3	2,5
	Justice	3	2,5
	Total	117	100

Upon reviewing Table 2, which presents the variables examined in articles pertaining to multicultural education, it is evident that many variables are explored within this realm. In the 56 scrutinized articles, 117 distinct variables were investigated concerning multicultural education. The variable most frequently analyzed for its association with multicultural education is gender, accounting for 13.7 percent (16 instances), followed by attitude at 12.9 percent (15 instances), and belief at 10.2 percent (12 instances). Conversely, variables such as branch, perspective, department studied, self-efficacy, interest in the course, understanding, family, tolerance, respect, help, success, and democracy exhibit the lowest level of connection to multicultural education, each featuring in just 0.8 percent (1 instance). This analysis underscores the diverse array of variables explored in conjunction with multicultural education, further highlighting the multifaceted nature of this field of study.

Used Measurement Tools

Table 3 demonstrates the distribution of the analyzed articles according to the measurement tools used.

Table 3

Distribution of Articles on Multicultural Education According to the Used Measurement Tools

	Code	f	%
Measurement Tools	Scale	22	36,0
	Interview	14	23,0
	Observation	2	3,3
	Document review	14	23,0
	Scanning	2	3,3
	Open-ended questions	2	3,3
	Survey	2	3,3
	Demographic information form	1	1,6
	Interview form	1	1,6
	Metaphor	1	1,6
	Total	61	100

Upon analyzing Table 3, which outlines the measurement tools employed in articles concerning multicultural education, it is evident that scales are the most frequently utilized tool, accounting for 36.0 percent (n=22) of the studies. Following scales, the interview and document analysis methods are employed at a rate of 23.0 percent (n=14). In contrast, the least commonly used measurement tools are demographic information forms and metaphors, each employed in 1.6 percent (1) of the studies. Notably, Figure 2 underscores a significant outcome from this study: while the qualitative research method is the most commonly adopted approach, the quantitative measurement tool—scales—takes precedence. This outcome highlights a compelling observation that the scale measurement tool is predominantly utilized in quantitative studies. This alignment between research methods and measurement tools underscores the inclination of quantitative studies to employ scales as a prominent means of data collection and analysis.

Level of Participants

Table 4 demonstrates the distribution of the analyzed articles according to the measurement tools used.

Table 4

Distribution of Articles on Multicultural Education According to the Study Group

	Code	f	%
Working Group	Primary School	3	6,4
	Middle School	3	6,4
	High School	1	2,1
	License	13	27,7
	Undergraduate	1	2,1
	Teacher	25	53,2
	Academician	1	2,1
	Total	47	100

Upon reviewing Table 4, it becomes evident that the study participants in articles focused on multicultural education primarily comprise teachers and undergraduate students. More than half of the studies (53.2 percent) center on teachers, while undergraduate students constitute the second-largest group at 27.7 percent (13 individuals). In contrast, the least frequently selected study participants in articles related to multicultural education are academicians and high school students, representing only 2.1 percent (1 person). Through this analysis, it is clear that efforts have been made to include a range of educational levels within the studies, despite variations in the frequency of studies conducted with certain participant groups. This collective approach underscores a commitment to examining multicultural education across different levels.

Results Obtained from the Analyzed Studies

Table 5 presents the main and sub-results obtained from the analyzed articles.

Table 5

Results Obtained from the Articles on Multicultural Education

Results		f	%	Work samples
Main result	Sub Outcome			
Contribution to the Student	Positive attitude change	3	4,5	Erbaş (2023)
	Harmony between students	1	1,5	Tosun at al. (2022)
	Students' use of positive metaphors	2	3,0	Sarıdaş (2022)
	Communication between students	1	1,5	Ateş & Aytekin (2020)
	Self-efficacy perception	1	1,5	Dolapcı & Kavgacı (2020)
	Becoming successful	1	1,5	Çiftçi & Aydın (2014)
	Gaining tolerance	2	3,0	Aslan & Aybek (2017)
	Gaining the value of equality and democracy	2	3,0	Aydın, Tonbuloğlu (2014)
Contribution to the teacher	Positive attitude change	6	9,0	Akman (2019)
	Self-development	3	4,5	Ortaş (2019)
	Classroom management	2	3,0	Yıldırım, Terzi (2017)
	Development of social intelligence	1	1,5	Akman (2017)
	Heightened perceptions	1	1,5	Marangoz Tosun at al. (2015)
Educational outcomes	Changes in perceptions of multiculturalism according to variables such as age, gender, education level, etc.	11	16,5	Şengül (2021)
	Perceptions of multiculturalism do not change according to variables such as age, gender, education level, etc.	6	9,0	Çapçı & Durmuşoğlu (2022)
	Not enough multiculturalism in textbooks	7	10,5	Bakır & Akcan (2021)
	Faith does not affect multiculturalism	1	1,5	Şengül (2021)
	Migrants' low perception of multiculturalism	1	1,5	Çifçi ve ark. (2021)
	Multicultural practices increase perception	2	3,0	Başkaya Tosun at al. (2020)
	Student behavior multicultural perception	1	1,5	Özbilen Tosun at al. (2020)
	High perception of multiculturalism among undergraduate students	2	3,0	Nayır & Çetin (2018)
	High perception of multiculturalism among people living in different ethnic groups	2	3,0	Yazıcı Tosun at al. (2016)
	Teachers' positive opinions	2	3,0	Kaya & Söylemez (2014)
Other results	Problems in a multicultural environment	2	3,0	Takır & Özerem (2020)
	Teachers' lack of understanding of the multicultural environment	2	3,0	Tünkler (2020)
	Failure to develop multiculturalism in Türkiye	2	3,0	Arslan (2016)

A noteworthy observation emerges after reviewing Table 5 and examining the articles focused on multicultural education. The most significant contribution to students lies in the cultivation of positive attitudes (Erbaş, 2023; Akman, 2019; Damgacı & Aydın, 2013; Kozikoğlu & Yıldırımoğlu, 2021). Additionally, students have embraced positive metaphors (Sarıdaş, 2022; Öksüz et al., 2016) and assimilated values such as tolerance (Aslan & Aybek, 2017; Aydın & Tonbuloğlu, 2014) as well as principles of equality and democracy (Aydın & Tonbuloğlu, 2014). Furthermore, multicultural education has fostered a sense of harmony among students (Tosun et al., 2022), bolstered self-efficacy perceptions (Dolapcı & Kavgacı, 2020), and enhanced the concept of achieving success (Çiftçi & Aydın, 2014).

Considering the contribution of multicultural education to teachers in articles on multicultural education, positive attitude development was also obtained in teachers, similar to the result obtained most in the contribution to students (Akman, 2019). In addition, the contribution of multicultural education to teachers' self-realization is another important result (Ortaş, 2019). Other results obtained are the contribution of teachers to classroom management (Yıldırım & Terzi, 2017), the development of their social intelligence (Akman, 2017), and the increase in their perceptions (Marangoz et al., 2015).

Considering the main result of educational outcomes, the most obtained educational outcome is that the perception of multiculturalism depends on variables such as age, gender, educational status, etc. (Şengül, 2021). The research has determined that girls have more developed multiculturalism receptivity than boys, young people than older people, and those with higher education levels than those with lower education levels. An additional crucial finding indicates that textbooks do not allocate sufficient importance to multicultural education. (Bakır & Akcan, 2021). It is interesting that while the most obtained result is that the perception of multiculturalism depends on variables such as age, gender, and educational status, the third most important result is that the perception of multiculturalism does not depend on these variables (Çapçı & Durmuşoğlu, 2022). Other results obtained are that belief does not affect multiculturalism (Şengül, 2021), immigrants' perception of multiculturalism is low (Çifçi et al., 2021), multicultural practices increase perception (Başkaya et al., 2020), student behavior multicultural perception (Özbilen et al., 2020), high multicultural perceptions of undergraduate students (Nayır & Çetin, 2018), high multicultural perceptions of those living in different ethnic groups (Yazıcı et al., 2016), positive opinions of teachers (Kaya & Söylemez, 2014). Examining further outcomes derived from articles on multicultural education, we encounter issues encountered within multicultural environments (Takır & Özerem, 2020), educators' limited comprehension of diversity within multicultural settings (Tünkler, 2020), and the insufficient progress of multiculturalism in Türkiye (Arslan, 2016).

Discussion and Results

The primary objective of this study is to analyze research on multicultural education within the context of Türkiye, focusing on various variables while also identifying prevalent trends within these studies. The research encompassed articles published between 2013 and 2022, employing the content analysis method. The obtained findings are subsequently deliberated alongside a synthesis of pertinent literature studies. Upon scrutinizing the publication years of studies centered around multicultural education, it becomes apparent that the most prolific years of publication were 2016 and 2020. Concurrently, drawing from the Global Trends report, it is highlighted that the tally of individuals forcibly displaced and subsequently classified as refugees stood at 51.2 million in 2013 and escalated to 59.5 million in 2014. This figure is a significant ascent from approximately 30 million a decade earlier. This report underlines the number of individuals assuming refugee status has been notably rapid since 2013. Mainly attributed to the unfolding events in Syria in 2011, a substantial influx of refugees has transpired within Türkiye since 2013. This circumstance has inherently positioned multicultural studies as an imperative realm warranting heightened attention from researchers. Given these considerations, the revelation that research endeavors into multicultural education have escalated in recent years aligns harmoniously with the substantiating details outlined above.

The prevalent research methodology commonly employed within studies focused on multicultural education is qualitative. Qualitative research, by its inherent characteristics, aims to delve into a profound comprehension of the subject matter, thereby elucidating the intricate relationships between individuals and phenomena. Given that multicultural education revolves around individuals and society, using qualitative research methodology to grasp multiculturalism comprehensively is inherently aligned with the obtained outcomes. Upon analyzing the studies based on their respective academic domains, it was ascertained that social studies education garnered the highest number of research endeavors. Conversely, the field with the least number of studies was mathematics education. While numerous factors might contribute to this discrepancy, it is noteworthy that the social studies curriculum often serves as a vehicle for imparting a substantial portion of our country's knowledge, skills, and societal values. Within social studies education, a surge in multicultural education-focused studies has been witnessed in recent years, particularly as this domain is regarded as a conduit for fostering citizenship education (Keskin & Yaman, 2014). Additionally, findings from document review research, as highlighted by Akhan and Yalçın (2018), indicate that multiculturalism is predominantly integrated into social studies textbooks. This insight provides a rationale for the predominance of multicultural education studies within social studies education.

Examining the favored target audiences reveals that teachers are the most commonly selected group for research participation. Subsequently, undergraduate students rank as the second most preferred group. Conversely, academics and high school students are the least sought-after participants. These findings underscore the prevalence of teachers, especially pre-service teachers, as the most favored research subjects. This inclination aligns with existing literature, which supports the notion that teachers and pre-service teachers should be the primary study groups. This approach enables pre-service teachers to cultivate professional behavioral adjustments through their education and foster cultural sensitivity in the students they will eventually instruct. An analysis of studies about multicultural education reveals that certain variables are commonly employed in research endeavors. These variables encompass attitudes, gender and belief, economic status, educational attainment, and language. Notably, a predominant trend in quantitative studies involves gauging the attitudes of research participants toward multicultural education through applying diverse measurement scales. The findings indicate a prevalent positive orientation among study groups towards multicultural education. Additionally, these affirmative attitudes have shown enhancement in tandem with the increased awareness the research fostered.

This inclination towards investigating the mentioned variables can be attributed to the comprehensive nature of multicultural education, which is defined as a paradigm aimed at establishing an equitable educational environment encompassing individuals of diverse races, ethnicities, beliefs, genders, languages, and socioeconomic strata (Banks et al., 2001). Hence, these variables have garnered considerable research attention due to their direct relevance to the fundamental tenets of multicultural education. The analyzed articles revealed that the most frequently employed measurement tool was quantitative, namely scales. Qualitative measurement tools like interviews and document analysis were commonly utilized following scales. The rationale behind using these measurement tools can be attributed to their advantages in terms of ease of data collection, streamlined measurement procedures, robust confidentiality safeguards, accessibility, and simplified analysis processes (Ekiz, 2020).

Among these, interviews stand out as one of the paramount qualitative research methods, serving as a straightforward and precise means to gather information about events and phenomena within their natural context (Yıldırım & Şimşek, 2006). Consequently, the employment of the interview method by researchers to obtain the most universally applicable information regarding multicultural education harmonizes seamlessly with existing literature. Additionally, document analysis, characterized by collecting, examining, and interpreting documents as primary research data sources, can be justified to acquire insights into multicultural education and facilitate comparisons with previous studies (Sak et al., 2021). Thus, document analysis in obtaining information about multicultural education aligns well with the practice endorsed by the scholarly discourse. Upon analyzing the outcomes of studies about multicultural education, a pattern emerges where it is evident that multicultural education engenders positive transformations in students' attitudes, fosters the utilization of positive metaphors, cultivates tolerance, and instills the values of equality and democracy. These studies often convey to students that diverse cultures encompass varying beliefs, languages, and socio-cultural structures. This approach likely contributes to heightened awareness among students, facilitating the acquisition of values such as tolerance, equality, democracy, and respect for cultural differences.

Furthermore, research results highlight the positive impact of multicultural education on teachers. This impact encompasses favorable changes in attitude, personal growth, and enhanced classroom management skills. This can be attributed to the fact that multicultural education equips teachers with the tools to embrace diverse perspectives, fostering an environment where they can augment their classroom management skills and personal development through exposure to differing viewpoints. In essence, these outcomes collectively underscore the instrumental role of multicultural education in nurturing positive transformations in both students and teachers. Through exposure to diverse cultural perspectives, individuals are empowered to embrace differences, advocate for equality, and contribute to creating inclusive educational environments. Reviewing the educational outcomes of the conducted studies, it becomes evident that the effectiveness of multicultural education is contingent on factors such as age, gender, and educational status. An additional noteworthy finding is the inadequate inclusion of multicultural education within textbooks. For instance, Kanatlı and Öztürk (2018) established that multicultural education imparts the values of respect and tolerance to students. This result is congruent with Aslan's (2017) findings, which indicated that multicultural education enhanced students' sentiments of respect, tolerance, and benevolence. Based on the collective findings, it can be inferred that studies centered on multicultural education consistently yield positive impacts on students, enabling them to elevate their self-development and foster an environment of respect and understanding.

"The research reveals that studies within the realm of multiculturalism predominantly fall within the domain of social sciences and have witnessed an increase in numbers in recent years. It is apparent that these studies frequently assess similar variables, such as attitudes, gender, and beliefs, utilizing the same research method, namely scales. Furthermore, the research often focuses on teachers as the primary research participants, consistently yielding findings that indicate the development of positive attitudes toward multiculturalism within these study groups. This pattern aligns with the findings of previous studies conducted by Kılavuz (2023), Öztürk (2018), Aslan (2017), and Türkkan (2017), which also noted that investigations into the sub-dimensions of multiculturalism have contributed to values such as tolerance, respect, social justice, and equality within their respective research groups."

Recommedations

This study highlights that research on multiculturalism is predominantly concentrated within the domain of social studies education. Conversely, there has been limited attention given to studies within the quantitative realm. Consequently, it is evident that there exists a pressing need to investigate the impact of multicultural education on factors such as students' attitudes and tolerance, particularly within quantitative fields. Moreover, the research findings indicate a scarcity of mixed methods approaches in current research. Given the wealth of data that mixed methods can provide, their increased incorporation in future studies could enhance research outcomes, yielding a more comprehensive understanding of the subject matter. It is worth noting that this study exclusively focused on the analysis of articles pertaining to multicultural education. Future research endeavors could broaden their scope to encompass dissertations, books, and reviews from diverse sources and disciplines, enabling a more holistic comprehension of the topic. Lastly, it is notable that academics and high school students were excluded as participants in multicultural education research. A recommendation for future studies would be to involve these groups more frequently, allowing for a more comprehensive examination of their contributions and perspectives within the realm of multicultural education.

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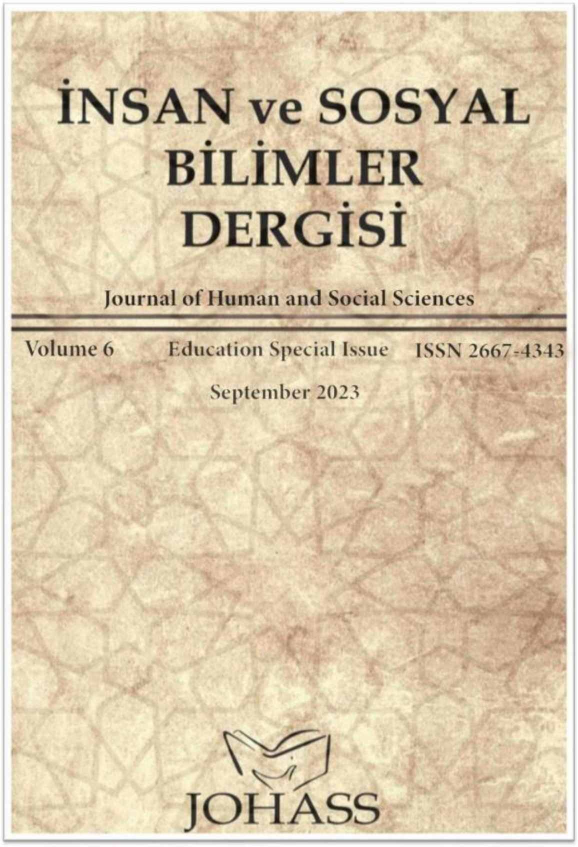

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Poems in Türkiye and Iran Social Studies Textbooks and Values Found in These Poems*

**This study is based on the author's doctoral thesis*.

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Poems in Türkiye and Iran Social Studies Textbooks and Values Found in These Poems*

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Abstract **Research Article**

This study aims to determine the poems in social studies textbooks taught in public schools in Türkiye and Iran and the values found in these poems. The study's research sample consists of social studies textbooks used in official state schools at all grade levels in both Türkiye and Iran. The data of this study, which followed qualitative research procedures, were obtained by document analysis method. In order to examine the values in the poems examined in the research, a value review form (VRF) is used. The data obtained is analyzed through content analysis. While a total of 19 poems are found in Türkiye textbooks, a total of 10 poems were found in Iran textbooks. According to the research findings, while Türkiye textbooks are generally featured by poems and poets who are accepted by the society, Iran textbooks are characterized by poems that bear witness to historical events. A noteworthy finding in Iran textbooks is that poems are interspersed in plain texts. A total of 16 different values are identified in 19 poems in Türkiye textbooks, with a frequency of use of these values being 44. In Iran textbooks, 16 values are found in 10 poems, and the frequency of use of values is 4 in terms of values found in the poems. In both countries' textbooks, love, patriotism, happiness, solidarity, respect, and altruism are the most emphasized values. It is recommended that historical poems should be utilized while teaching historical subjects in social studies courses. Within the scope of the research, it is recommended to carry out studies on whether it is appropriate to include excerpts from poems that support meaning in addition to plain texts in textbooks, effectiveness and usefulness, etc.

Keywords: Literary, value, values education, textbooks, poetry

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Introduction

The world is globalising in terms of knowledge, culture, technological developments and lifestyles. Along with these multifaceted developments in contemporary societies, there is a noticeable decline in the emotional aspects of human beings. In the face of this rapid and influential change, there is a need for effective values education to raise individuals who attach importance on the scientific and rational aspects demanded by the era, without losing essential feelings such as respect, love, and tolerance inherent in human nature, as well as individuals who can empathize, work diligently, and maintain honesty (Ekinci, Çelikpazu-Aktaş, 2011; Subaşı, 2014).

The main purpose of values education is to raise citizens with character, moral values and a sense of responsibility by giving priority to universal values that are the common heritage of humanity. In this respect, values education aims to provide to individuals significant ethical and civil values such as respect, love, virtue, responsibility, courage, determination, faith, justice, and individual discipline. Educational institutions have responsibility to defending, protecting, and promote universal fundamental values and the values that individuals will create around these fundamental values. Although values are subjective, it should not be ignored that values education has a guiding, even coercive, aspect. Values education emphasizes the accuracy of certain universal values like respect, love, honesty, responsibility, and justice and basic values must be taught in schools as it helps students to understand and give importance to these values and to live their lives according to these values (Altan, 2011).

The future of a society depends on individuals who have embraced its values and strengthened these values with their competencies. Therefore, the education system aims to equip each of its member with the ability to make appropriate ethical decisions and exhibit them in their behavior. The education system, which considers the raise of individuals who embrace fundamental values as its primary duty, should be able to influence the values, habits, and behaviors of the new generation. The education system fulfills its function within the framework of imparting values through the educational program, which includes curriculum. Recognizing the vital importance of values education within the scope of the social studies curriculum, a separate section is dedicated to it. In the social studies curriculum, in addition to the fundamental values of respect, love, justice, patriotism, responsibility, friendship, altruism, honesty, self-control and patience, the values desired to be acquired through the social studies course are included (Ministry of National Education [MoNE], 2018). Social Studies is one of the key courses in basic education, which aims to equip individuals with the knowledge, skills and values necessary to become active members of society (Çengelci, 2013). Among the course that determine children's place in society, the social studies course have a significant position in the curricula of many countries (Öztürk & Deveci, 2011). Due to its interdisciplinary nature, Social Studies includes content from disciplines such as history, geography, literature, philosophy, psychology, sociology, economics, law, archaeology and anthropology (MoNE, 2004).

Social studies, which has an important task to become intertwined with students' daily lives, can achieve its goals by using different teaching methods and strategies within the teaching process (Demir, 2011). Although there is no method and strategy that will completely ensure learning in social studies education, literary works as a tool of techniques and strategies to be used can increase the effectiveness of teaching in course activities. (Gülüm & Ulusoy, 2008, p. 114). In educational environments where literary works are used, students become learners through doing and experiencing. During this learning process, as they create research reports together with their peers and use multiple sources in their decision-making process, they develop the consciousness and skills to use these in their personalities. In educational environments where literary works are used, students who learn by doing-living and in this learning process, while creating research reports with their friends, develop the consciousness and ability to use more than one source in their personalities before reaching a final decision, will show the ability to use them in their future lives as individuals who are aware of their responsibilities. In this way, it can be ensured that students become active citizens who are free from stereotypes, can think critically as a member of democratic society, can develop positive attitudes and values by examining beliefs and values, and are compatible with society (Öztürk, et al., 2012).

Literary works are used as teaching materials at various levels in the education system. Literary works contribute to the development of students' skills such as language, reading and writing, empathy, and communication. They can also help students acquire moral and human values, socialization, historical awareness and consciousness, sensitivity towards historical heritage and its preservation, and the preservation of cultural elements. Since literary works enhance thinking skills, the learning acquired through this technique can be long-lasting. Literary works are highly effective in both increasing students' interest in the course and providing habits of reading, making connections between subjects, and bringing them to life

(Tekgöz, 2005, p. 90). With the use of literary works can also facilitate communication between courses (Öztürk, 2007, p. 70-78).

The use of literary work in lessons is effective not only in acquiring national and universal values but also in contributing to the development of various skills in students, such as comprehension, analysis, interpretation, seeing events from different perspectives, and building empathy (McGowan and Guzetti, 2004). Transmitting the cultural heritage of humanity to future generations is especially possible through literature and books because existence of literature is based on society's culture and history. Literary works can provide vital contributions to each individual in the society to be a good citizen, to have good values, to make sense of the time in which they live by establishing a connection between the past, present and future, being aware of their development over time (Seçgin & Kapan, 2020; Sidekli, Yangın, & Tangülü, 2013). Literary works provide children a beautiful living space, a mysterious and also exciting environment. Thus, literary works are not just a package of information but usable real-life examples of acquired knowledge (Tekgöz, 2005, p. 5). The use of literary works as teaching materials in social studies education plays a critical role in achieving the affective goals of students (Otluoğlu, 2001). The use of literary works in the development of the skills that the social studies course aims to provide students with can help them to reach their emotional world and take on more responsible and more conscious roles in society (Demir & Akengin, 2012).

In addition to the skills that need to be acquired in all courses, it is also essential to achieve cognitive, affective, and psychomotor objectives expected in the curriculum within the scope of social studies. In this regard, literary works make a substantial contribution because; via literary works, students can compare themselves with people who live in different times and places, and appreciate the way of life of people in different geographic locations. This process contributes to value education by developing empathic thinking habits in students (Sağlamer, 1980 cited in Öztürk, et al., 2012). In other words, individuals via literary texts, come across certain values, discover these values throughout the process, make them concrete by observing the values among events or characters, internalize them, and decide which values they can adopt by passing them through their mental filters. At this point, to enable students to gain mentioned benefits, appropriate literary works should be included in the educational process in line with their age (Eryılmaz & Köse, 2018).

Societies reflect their historical events and values, their sorrows and joys in poems. Thus, poems reflect the common values of societies. There is a big treasure in poetry; its simplicity and complexity can fascinate and tell stories and elicit feelings in just a few lines. It could open doors to rooms that were closed and give meaning beyond words (Strömner, 2013). The fact that poems have an impressive and striking feature in terms of language and expression makes it important to use poems in education (Öztaş, 2018). Thus, poetry can serve many perspectives of teaching values (Strömner, 2013). In this sense, poems, which are a literary genre, can be used in social studies courses for values education. There are studies indicating that poems should be utilised in value education (Conroy, 1999; Dodson, 1993; Durukoğlu & Doyumğaç, 2017; Markert & Healy, 1983; Öztaş, 2018).

Social studies, one of the leading courses in values education, fulfills its important and vital duty effectively via the use of literary works (Tekgöz, 2005). Among literary works, poetry encompasses a wide range of topics (Kaya, 2013). As poems also reflect the educational and cultural values of individuals, together with their internal world, such as respect, love, patriotism, peace, morality, tolerance, responsibility, and patience, it is of great importance to consider poems in terms of values education. Another important aspect is that engraining in universal values via poetry is also important in terms of esthetic value (Durukoğlu and Doyumğaç, 2017). The "value inculcation approach", which is one of the 5 approaches put forward by Sparka in the teaching of values (İşcan, 2007), is suitable for the poetry genre among literary products. (Tökel, 2008). Studies which focus on poems in terms of values education have determined that poems have rich content in terms of values education (Bebek, 2020; Gök and Alyılmaz, 2021; Kurtoğlu, 2017).

Because all this compelling evidence, it is evident that drawing on literary works, particularly poetry, is an important and effective method for transmitting values in the social studies course. This study aims to identify the poems used in social studies textbooks in Türkiye and Iran and the values found in these poems.

Method

Model

This study, in which the poems used in Türkiye and Iran social studies textbooks and the values found in these poems were tried to be determined, was carried out within the framework of qualitative research procedures. Yıldırım and Şimşek (2008) define qualitative research as an approach that employs qualitative data collection methods such as observation, interviews, and document analysis and this approach is used to reveal perceptions and events in a natural setting in a realistic and holistic manner.

Study Group

The study's research sample consists of social studies textbooks used in official state schools at all grade levels in both Türkiye and Iran. While in Türkiye, social studies are taught at the 4th, 5th, 6th, and 7th grade levels, in Iran, are taught at the 3rd, 4th, 5th, 6th, 7th, 8th, and 9th grade levels. Information on the textbooks of both countries is as follows.

Iran;

1. Iran Ministry of Education, (2017). Social Studies 3rd Grade Textbook, Tehran: Offset.
2. Iran Ministry of Education, (2017). Social Studies 4th Grade Textbook, Tehran: Offset.
3. Iran Ministry of Education, (2017). Social Studies 5th Grade Textbook, Tehran: Offset.
4. Iran Ministry of Education, (2017). Social Studies 6th Grade Textbook, Tehran: Offset.
5. Iran Ministry of Education, (2017). Social Studies 7th Grade Textbook, Tehran: Chap.
6. Iran Ministry of Education, (2017). Social Studies 8th Grade Textbook, Tehran: Chap.
7. Iran Ministry of Education, (2017). Social Studies 9th Grade Textbook, Tehran: Chap.

Türkiye;

1. Karabıyık, E. Ü. (2016). Elementary School 6th Grade Social Studies Textbook. Ankara: Evren.
2. Özensoy, A. U. & Aynacı, C. (2016). Elementary School 5th Grade Social Studies Textbook. Ankara: Berkay.
3. Şahin, S. C., Bayram, Ö. & Midilli A. (2016). Elementary School 4th Grade Social Studies Textbook. Ankara: Koza.
4. Türkiye Ministry of National Education (MoNE) (2016). Elementary School 7th Grade Social Studies Textbook. Ankara: MoNE.

Data Collection and Analysis

The data for the study consist of poems found in social studies textbooks used in official state schools in Türkiye and Iran, as indicated in the bibliographic information provided above. Initially, textbooks from both countries are obtained. Document analysis, one of the qualitative research technique, is utilized in the study. In the document analysis technique, various written and visual materials such as books, archival records, journals, biographies, letters, diaries, films, etc., related to the subject under consideration, are examined (Balcı, 2001). If document analysis technique is used as a sole research method, the documents should be comprehensively analyzed with content analysis, according to the purpose of the research (Yıldırım & Şimşek, 2008). In the document analysis, the first step is to identify the poems used in the textbooks. Subsequently, a Value Review Form (VRF) is used for the analysis of the data acquired from the identified poems. The Value Review FormVRF, consisting of 20 items, is prepared by Cengiz & Duran (2017) by taking into consideration values found in the UNESCO Value List, Living Values List, and Rokeach Value Inventory. When looking at the literature, it can be observed that there are many value review forms. The reason for preferring the value review formVRF mentioned above in this study is its suitability for the comparative study of two different countries. In other words, the contents of the value review forms encountered in the literature are generally created by associating them with the curriculum of the country where the study is conducted. Since this study examines textbooks from two different countries, it cannot be expected that a form created based on the curriculum of one country will provide the purpose. For this reason, the form that can be applied universally is preferred. Necessary permissions are received from the authors for the use of the Value Review FormVRF created by Cengiz and Duran (2017). Information about the values included in the value review formVRF and where these values were obtained are provided in Table 1 below..

Table 1

Values in The VRF and Their Source

Values	Their Source
Modesty Peace Honesty Tolerance Cooperation Happiness	Values from the Living Values List

Freedom Respect Love Responsibility	
Giving importance to unity of family Sedulity Solidarity Esthetics Hospitality Cleanliness Patriotism Altruism	Values from UNESCO Values List
Friendship Politeness	Values from Rokeach's Value Classification

Descriptive analysis was used to analyse the data from the study. The analyses were carried out independently of each other by 3 different researchers. Thus, it is aimed to enhance the internal validity of the data. Each poem in the textbooks is individually investigated by the researchers according to the VRF. The values identified in the poems by the researchers are marked in the VRF next to the respective value. Values that were marked by at least two researchers are accepted. The poems found in the textbooks of the two countries were first collected in a common form at the grade level and then merged under a single form by combining all grade levels. The data obtained in this way were tabulated and presented in the findings section.

Compliance with Ethical Standard

During the writing process of this study, scientific, ethical and citation rules were followed; no falsification was made on the collected data.

Findings

In this section, information is provided about the poems found in social studies textbooks in Türkiye and Iran, and the values present in these poems. While Türkiye's social studies textbooks (grades 4, 5, 6, and 7) include a total of 19 poems, Iran's social studies textbooks (grades 3, 4, 5, 6, 7, 8, and 9) include a total of 10 poems. Information about the poems found in Türkiye textbooks is provided below.

Table 2

Information About Poems in Türkiye's Textbooks

Line	Unit	Subject	Page
		4th-Grade	
1	Learning About the Past	Clues of the Past	35
2	Where We Live	Getting to Know Our Environment	70
3	Where We Live	Getting to Know Our Environment	75
4	All Together	Who Solves Our Problems?	138
5	People and Governance	Happy Holidays	169
		5th-Grade	
1	Step by Step in Türkiye	Differences and Similarities Are Our Wealth	39
2	Step by Step in Türkiye	Differences and Similarities Are Our Wealth	39
3	Step by Step in Türkiye	Our Common Values	41
4	Getting to Know Our Region	Natural Disasters and Our Culture	68
5	Getting to Know Our Region	Natural Disasters and Our Culture	69
6	One Country, One Flag	Our National Values	151
7	One Country, One Flag	Our National Values	152
		6th-Grade	
1	Resources of Our Country	Our Resources and Economy	92
2	Our Country and the World	Leading Türkiye	122
3	The Adventure of Democracy	The Best Democracy	137
4	The Adventure of Democracy	The Place of Women in Türkiye Society	150
		7th-Grade	
1	Communication and Human Relations	Communication is an Art	19
2	Economy and Social Life	The Power of Soil	118
3	Bridges Between Countries	A World War	172

When Table 2 is examined, it is observed that there are a total of 19 poems in Türkiye social studies textbooks. The distribution of poems according to grade levels is as follows: in the 4th-grade, there are 5 poems; in the 5th-grade, there are 7 poems; in the 6th-grade, there are 4 poems, and in the 7th-grade, there are 3 poems.

Image 1

An Example of a Poem Used in Türkiye's 4th-Grade Textbook (Page 169)

The Poem given in Image 1 can be translated into English as below.

23rd APRIL
I woke up with happiness,
Early in the morning,
It felt like I was running,
While going to my school,

The joy that embraced me,
Keeps growing steadily,
There's something hard to describe,
In this endless love.

Adorned with flags,
Streets and squares
Hurry, goes
Those who are late to the ceremony

Certainly, the heart swells with enthusiasm,
Every person who loves their homeland,
Today is a great holiday,
Because it's April 23rd

Image 2

An Example of a Poem Used in Türkiye's 6th-Grade Textbook (Page 137).

CUMHURİYET

Karanlıktan aydınlığa,
Giden yoldur cumhuriyet.
Özgür, mutlu insanlığa
Giden yoldur cumhuriyet.

Egemenlik ulusundur.
Şenlik, dirlik ulusundur,
Özgürlükle sonsuzluğa,
Giden yoldur cumhuriyet

Aydınlıktır geleceğim,
Mutluluğa ereceğim,
İnançla yürüyeceğim
Mutlu yoldur cumhuriyet

Hadi Besleyici

Belirli Günler ve Haftalar, s. 48.

The Poem given in Image 2 can be translated into English as below.

Republic

From darkness to light,
The path is the republic.
To a free, happy humanity,
The path is the republic.

Sovereignty belongs to the nation,
Festivity, harmony belongs to the nation,
From freedom to infinity,
The path is the republic.

My future is bright,
I will attain happiness,
I will walk with faith,
The path is a happy one, the republic.

Information about poems in Iran textbooks is given below.

Table 3

Information about Poems in Iran Textbooks

Line	Unit	Subject	Page
		3rd-Grade	
1	Our Home	I love Our Home	44
		4th-Grade	
1	We are Iranians	National Symbols	90
2	We are Iranians	National Symbols	91
		6th-Grade	
1	Our Friends	Friendship	13
2	Our Friends	Friendship	13
3	Our Friends	Friendship Etiquette	16
		7th-Grade	
1	Cope With Emerged Events	Cooperation and Empathy in Events	23
		8th-Grade	
1	Mongol and Timurid Era	Attacks of Genghis and Timur on Iran	93
		9th-Grade	
1	Culture and Identity	Identity	123
2	Culture and Identity	Identity	124

When Table 3 is examined, it is observed that there are a total of 10 poems in Iran social studies textbooks. The distribution of poems according to grade levels is as follows: in the 3rd-grade, there is 1 poem; in the 4th-grade, there are 2 poems; in the 6th grade, there are 3 poems; in the 7th-grade, there is 1 poem; in the 8th-grade, there is 1 poem, and in the 9th-grade, there are 2 poems. It's worth noting that there is no poem of literary genre in the 5th-grade textbook.

Image 3

An Example of a Poem Used in Iran 3rd-Grade Textbook (Page 44).

The Poem given in Image 3 can be translated into English as below.

Home

In the wind and rain, I arrive tired,
With a hat, a coat, and a leather bag
Let's go to the embrace of our home,
It always welcomes us with its warmth.
My little and smiling sister,
Runs toward me with her toy baby.
My mother is placing jasmine flowers and carnations
To the porcelain vase.
My mother has cooked a delicious meal,
We sit side by side and wait,
As we always do, for my father to come home,
To set the table for dinner.
In winter and summer,
Our safe home is shelter,
In bitter, bad, and hard times,
It's a place of relaxion and endurance

Image 4

An Example of a Poem Used in Iran 4th-Grade Textbook. (Page 90)


خانه‌ی عزیز من

می‌کشم دوباره من   نقشه‌ای به روی خاک
نقشه‌ای که می‌شود   خانه‌ای بزرگ و پاک
**
روی نقشه می‌کشم   کوه و تپه و کویر
مردمان مهربان   کودک و جوان و پیر
**
باغ لاله می‌کشم   رنگ خون یک شهید
پرچمی پرافتخار   سبز و قرمز و سفید
**
غرق بوسه می‌کنم   نقشه را دوباره من
در کنار خانه‌ام   می‌نویسم ای وطن
**
تا همیشه می‌تپد   قلب من برای تو
خانه‌ی عزیز من!   جان من فدای تو!
**
«کبری هاشمی»

The Poem given in Image 4 can be translated into English as below.

My Precious Home

1. *I draw again*   *A picture on the ground*
2. *A picture that becomes*   *A big and clean house*

**

3. *In the picture, I draw*   *Mountains, hills, and stones*
4. *Helpful people*   *Children, youth, and the elderly*

**

5. I draw a tulip garden *A the blood of a martyr*
6. A proud flag *Green, red, and white*

**

7. I lose myself in your kiss *Me again in the Picture*
8. At the edge of my house, *I write "Oh, Homeland*

**

9. Always beats *My heart for you*
10. My precious home *My life is sacrificed to you*

Information is given about the values found in poems in Türkiye textbooks.

Table 4

Values in Poems in Türkiye Social Studies Textbooks

	Value	*f*	%
1	Love	9	20
2	Patriotism	7	16
3	Happiness	6	14
4	Solidarity	4	9
5	Freedom	3	7
6	Respect	2	5
7	Cooperation	2	5
8	Sedulity	2	5
9	Helpfulness	2	5
10	Responsibility	1	2
11	Giving importance to unity of family	1	2
12	Honesty	1	2
13	Tolerance	1	2
14	Peace	1	2
15	Friendship	1	2
16	Humility	1	2
17	Esthetics	-	-
18	Hospitality	-	-
19	Politeness	-	-
20	Cleanliness	-	-
	Total	44	100

When examining Table 4, it is observed that out of the 20 values listed in the VRF, 17 of them are represented in Türkiye textbooks' poems, while 3 of them are not included. Among these, the value "Love" (9) is the most frequently mentioned in Türkiye textbooks' poems, followed by "Patriotism" (7), "Happiness" (6), "Solidarity" (4), and "Freedom" (3) values, respectively. It is seen that the values of "Hospitality," "Politeness," and "Cleanliness" are not mentioned in in the textbooks. In Türkiye textbooks, a total of 16 values are mentioned 44 times.

Image 5

A Example Poem Containing the Most Common Values of Love and Patriotism in Türkiye Textbooks (5th-Grade, Page 151)

Bayrak

Ey mavi göklerin beyaz ve kızıl süsü
Kız kardeşimin gelinliği, şehidimin son örtüsü,
Işık ışık, dalga dalga bayrağım,
Senin destanını okudum, senin destanını yazacağım.
Ey şimdi süzgün, rüzgârlarda dalgalı;
Barışın güvercini, savaşın kartalı
Yüksek yerlerde açan çiçeğim
Senin altında doğdum,
Senin dibinde öleceğim.

Arif Nihat Asya (Kısaltılmıştır.)

H. Fethi Gözler, Yunus'tan Bugüne Türk Şiiri, s. 456, 457.

Türkiye-Kazakistan Millî Takımlar Futbol karşılaşması

Türk seyirciler bayrağımızla karşılaşmaları izliyorlar. Sizce bunun sebebi nedir?

The Poem given in Image 5 can be translated into English as below.

Flag
You, white and red ornament of blue skies,
My Sister's wedding dress, the last cloth of my martyr!
My bright, wavy flag,
I read your epic, I will write your epic.
You, languorous, wave in the winds;
The dove of peace, the eagle of war...
My beautiful flower that blooms in high places;
I was born under you,
I will die under you.

Information is given about the values found in poems in Iran textbooks below.

Table 5

Values Found in Poems in Iran Social Studies Textbooks

	Values	*f*	%
1	Love	7	20
2	Patriotism	4	12
3	Responsibility	4	12
4	Helpfulness	3	8

5	Solidarity	2	6
6	Happiness	2	6
7	Respect	2	6
8	Friendship	2	6
9	Freedom	1	3
10	Humility	1	3
11	Cooperation	1	3
12	Giving importance to unity of family	1	3
13	Honesty	1	3
14	Tolerance	1	3
15	Esthetics	1	3
16	Politeness	1	3
17	Peace	-	-
18	Hospitality	-	-
19	Sedulity	-	-
20	Cleanliness	-	-
	Total	34	100

When examining Table 5, it is observed that out of the 20 values listed in the VRF, 16 of them are represented in Iran textbooks' poems, while 4 of them are not included. Among these, the value "Love" (7) is the most frequently mentioned in Iran textbooks' poems, followed by "Patriotism" (4), "Responsibility" (4), "Helpfulness" (3), “Solidarity” (2), “Happiness” (2), “Respect” (2) and “Friendship” (2) values, respectively. It is seen that the values of "Sedulity," "Hospitality," and "Cleanliness" are not mentioned in in the textbooks. A total of 16 values are mentioned 34 times in Iran textbooks.

Image 6

An Example Poem Containing the Most Common Values of Love and Responsibility in Iran Textbooks (7th-Grade Page 25)

۵ـ این شعر از کیست؟ بـنـی آدم اعـضای یـک پیکرنـد   که در آفرینش ز یک گوهرند

چو عضوی به درد آورد روزگار   دگـر عـضوها را نـماند قرار

تـو کـز مـحنت دیـگران بی‌غمی   نـشاید کـه نـامت نهند آدمی

معنای شعر را توضیح دهید

The Poem given in Image 6 can be translated into English as below.
The human beings are parts of one body
Because their creation is of the same substance,
If an part gets sick,
Others will have no peace.
One who is not troubled by the pain of others,
You're not suitable to be called human!

Discussion and Results

In line with the constructivist educational approach, value education comes to the forefront stage in the design of teaching programs. In this formation, which emphasises the transmission of values, the social studies is one of the most important courses because of its content. Social studies can utilize various methods and strategies to fulfil this responsibility (Demir, 2011). In the context of value education, the use of literary products (Gülüm & Ulusoy, 2008, pp. 114) as a tool for utilizing techniques and strategies can be highly effective. Literary works are the transfer of human life to writing in an artistic way. Its subject is human, its source is human life. The subject of social studies is also the life of society.

While in Türkiye, social studies textbooks are taught at a total of 4 grade levels: 4th, 5th, 6th, and 7th grades, in Iran, social studies textbooks are taught at seven grade levels: 3rd, 4th, 5th, 6th, 7th, 8th, and 9th grades. A total of 19 poems are included in the social studies textbooks that taught at the 4th grade level in Türkiye. In other words, there are 4.75 poems per grade level where the subject is taught. A total of 10 poems are included in the social studies textbooks that taught at the 7th grade level in Iran. In other words, there are 1.43 poems per grade level where the subject is taught. When the ratios of poems in the textbooks of both countries are taken into consideration, it is seen that Türkiye's textbooks use more than three times more poems per grade level than compared to Iran’s textbooks. It is noteworthy result that the use of poetry, which is the strongest tradition in Iran daily life (Mungan, 2008, pp. 88), is represented at very low levels in the textbooks. In Iran, poetry has been ingrained in the memory of the people, and as a result, the graves of poets are adorned with elegant tombs in lush rose gardens (Kaska, 2020). It is thought-provoking that poetry, which is a part of Iran life, is almost neglected in social studies textbooks, especially since it is a lesson with social content and determines the place of children in society.

The majority of poems featured in Türkiye textbooks are well-known, widely accepted by society, or written by renowned poets or focus on importance of specific days or weeks of importance. For example, poets such as Mehmet Akif Ersoy (author of the "İstiklal Marşı" and "Çanakkale Şehitlerine"), Aşık Veysel (known for "Kara Toprak" and "Emeklerim Zay’eyledi Sel Benim"), Arif Nihat Asya ("Bayrak"), and Bahtiyar Vahapzade ("Ana Dili") are frequently included. Poems like "Yemen Türküsü," "Ilgaz Türküsü," and "Marmara Türküsü" are also commonly found. Besides, poems dedicated to specific days and weeks, such as 23rd April, Red Crescent, Republic Day, and Earthquake, are included. It can be said that the use of poems and poets generally accepted by the society in Türkiye textbooks is preferred to increase the effectiveness of the course.

When analyzing poems included in Iran textbooks, it is seen that nearly half of the poems (4) are attributed to Sadi Şirazi (Sa'dî-yi Şîrâzî). The remaining poems are mostly belong to historical periods from the past (Great Seljuks, Kharezmshahs, Safavids), in other words, they are historical poems. Considering the potential benefits of using poems for conveying the values and historical events of the era in which they were written (Öztaş, 2018), it can be said that using poems when addressing historical topics in Iran textbooks is an effective way. The official anthem of Iran is also among the featured poems.

In Türkiye's textbooks, poems are usually given separately from the plain texts and under a title, whereas in Iran's textbooks, poems are both given separately from the plain texts and under a title, as well as within the plain text and without a title. This type of usage can has certain advantages. Without disrupting the flow of the content, incorporating poems within the prose text, can be an effective way to reinforce the subject. Sadi Shirazi's "Gulistan", which was written in a beautiful style that could not be imitated for centuries, poems suitable for the stories were placed between the educational and instructive stories (Kartal, 2011). It can be supposed that the existing practice in Iran textbooks might be influenced by this historical usage. Another reason for this practice could be the widespread use of poetry in everyday life in Iran.

Due to the constructivist approach, the use of literary works in social studies courses has started to gain importance and the use of literary products has been recommended in the instructional programs prepared in line with this approach (Kolaç & Özer, 2018). Kaymakcı (2013) conducted a study on the status of literary products used in textbooks prepared according to the social studies instructional programs, which was created in 2005 based on the constructivist approach. In this study, Kaymakcı (2013) categorized the years 2005-2009 as the first period and the years after 2010 as the second period. He found that a total of 15 poems were used in the social studies textbooks of the first period (4th, 5th, 6th and 7th grades). In the textbooks of the second period (4th, 5th, 6th and 7th grades), a total of 9 poems were included. In this study, the number of poems used was 19, can be interpreted as an increase in the use of poetry in social studies textbooks compared to previous periods. Yet, this increase should not be perceived as reaching a sufficient level. In their study on the use of literary works in lesson planning by candidate of social studies teachers, Kolaç and Özer (2018) concluded that candidate teachers primarily utilized plans mostly by using poetry as a literary work. This result, based on the practices of candidate teachers, can be interpreted as an indication that there is not enough corresponding material in the textbooks. Because both in the textbooks examined in this study and in previous studies (Kaymakcı, 2013), it is seen that there is not even one poem per unit in Türkiye social studies textbooks.

When examining the use of poems according to grade levels, it can be observed that in 4th-grade, Türkiye used 5 poems, while Iran used 2. In 5th-grade, Türkiye used 7 poems, but Iran did not include any. In 6th grade, Türkiye used 4 poems, while Iran used 3. Finally, in 7th-grade, Türkiye used 3 poems, whereas Iran used 1. These findings indicate that Türkiye and Iran textbooks do not show parallelism in the use of poems across grade levels. The grade level with the highest use of poems in Türkiye textbooks is the 5th grade, while in the corresponding Iran textbook for the same grade, no poems were included. In Türkiye textbooks, the lowest number of poems (3) is found in the 7th-grade level. In Iran textbooks, the 6th-grade textbook contains the highest number of poems (3). Türkiye textbooks seem to have a more balanced distribution of poems across grade levels compared to Iran. Kaymakcı (2013) conducted a comparative study of Türkiye social studies textbooks from two different periods. In his study, he found that in the first period, similar to the results obtained for Türkiye textbooks in this study, the 5th-grade textbook had the highest use of the literary genre of poetry (7 times). This usage can be attributed to the content of the 7th-grade textbook.

In Türkiye textbooks for the all 4th-grade level, 16 different values and 19 poems are found and the frequency of these values in poems was 44. In Iran textbooks for the 7th-grade level, 10 poems and 16 different values have been found, with the values occurring 34 times in the poems. It can be said that the poems in Iran textbooks contain both more different values (16) and a higher frequency of these values (34) compared to the poems found in Türkiye textbooks.

When we look at the values found in the poems used in textbooks, in Türkiye textbooks, the most commonly found values in the given poems are, in order, love, patriotism, happiness, solidarity, freedom, respect, cooperation, diligence, and helpfulness, with the least commonly found values are responsibility, importance given to family unity, honesty, tolerance, peace, friendship, and humility, with the values of hospitality, esthetics, politeness, and cleanliness not found at all. In Iran textbooks, the most commonly found values in the poems are love, patriotism, responsibility, helpfulness, solidarity, happiness, respect, and friendship, with the least commonly found values freedom, humility, cooperation, importance given to family unity, honesty, tolerance, esthetics, and politeness, and the values of hospitality, peace, diligence, and cleanliness are not found at all. In both countries' textbooks, love, patriotism, happiness, solidarity, respect, and helpfulness are the most emphasized values. It is observed that hospitality and cleanliness values are not included in the textbooks of both countries. This result can be interpreted as both countries' textbooks emphasizing similar values via poetry. When it is considered the use of literary works in social studies textbooks is intended to impart certain values such as love, patriotism, and respect (Kaymakcı, 2013), it can be interpreted that both countries' textbooks serve this purpose. Love, patriotism, happiness, solidarity, freedom, respect, cooperation, diligence, and helpfulness which are the most emphasized in Türkiye textbooks, align with the values given in the Türkiye social studies instructional program (MoNE, 2018).

In the current study, although there are some differences in the results obtained for poems, Kaya (2019) conducted a study that contains similarities by considering all the content in 7th-grade social studies textbooks in Türkiye and Iran. In his study, Kaya (2019) found that in the Türkiye textbook, values such as scientificity, freedom, responsibility, and sensitivity were prioritized respectively, while in the Iran textbook, values such as sensitivity, responsibility, scientificity, and aesthetics were prioritized respectively. While this study only focuses on poems, and the aforementioned study (Kaya, 2019) examines the entire content of the textbooks, it can be observed that freedom and responsibility are common values for Türkiye, and responsibility and aesthetics are common values for Iran, even though it does not allow for a direct comparison.

In both countries' textbooks, love has been the most prevalent value in poems. This finding is supported by previous studies where the value of love was also found to be the most prominent in poems (Tay & Nalçacı, 2020; Çapoğlu & Okur, 2015). In their study aimed at identifying the values present in poems in 8th-grade Turkish language textbooks, Çapoğlu & Okur (2015) examined textbooks from 7 different publishers. In their study, in terms of the frequency of value (how many times a value is used in poems), they found that the value of love was used 32 times out of a total of 104 instances of values in the books, which corresponds to approximately 31% of the total values used. Tay and Nalçacı (2020) found "love" as one of the most common values in their study to determine the values found in the National Anthem, which is a poetry literary genre. This study also included official anthems from both countries. In the Iran national anthem, there are 4 values, namely love, patriotism, responsibility, and freedom. In the Turkish national anthem (the first two verses of the İstiklal

Marşı), the values found are love, patriotism, and freedom. This result indicates that both countries' national anthems share similar values.

In Türkiye textbooks, a total of 19 poems are used, and the total of different values carried by these 19 poems is 16, with a frequency of 44 for the total values used in the 19 poems. In the calculation to be made by taking the average of the poems used in textbooks (44/19), it is observed that each poem has more than two values on average (2,31). This result indicates that the poems used in textbooks are quite rich in terms of value transfer. Many studies analyzing poems in terms of value transfer support the results obtained in this study (Bebek, 2020; Çapoğlu & Okur, 2015; Durukoğlu & Doyumğaç, 2017; Gök & Alyılmaz, 2021; Kurtoğlu, 2017,). In their study on the values in the poems in the 8th grade Türkiye textbooks belonging to 7 different publishing houses, Çapoğlu and Okur (2015) found values in a total 45 poems and the frequency of these values was 104. The average value per poem ratio is the same as the current study (2.31).

In the related study, national and universal values such as love, patriotism, happiness, solidarity, freedom, respect, cooperation, diligence, helpfulness, responsibility and friendship were included in the poems in the textbooks of both countries. Furthermore, Strömner (2013) found that the poems used in the textbooks carry both national and universal values. Considering that the use of literary works is believed to be effective in acquiring national and universal values (McGowan & Guzetti, 2004), it can be seen that the poems used in the current study serve the expected purpose of using literary works. In addition to the acquisition of these values, the literary works in which these values are embedded are also believed to contribute to the development of many skills in students, such as comprehension, analysis, interpretation, seeing events from different perspectives, and empathy (Creely et al. 2022; Gulla, 2014; McGowan & Guzetti, 2004; Soriano de Alencar, 1991). Therefore, it can be said that the poems in both countries' textbooks, as discussed in the current study, are also effective in this aspect. In their studies, Tokdemir (2007) and Kılcan (2009) determined that social studies and history teachers' values of patriotism and national unity and solidarity are the most important values that students should acquire in social studies and history courses. The results of this study support the views of teachers in the other studies mentioned above.

In conclusion, Türkiye social studies textbooks contain more poetry compared to Iranian social studies textbooks. In Turkey's textbooks, generally, well-known poems are preferred, while in Iran's textbooks, almost half of the poems belong to the famous Iranian poet Sadi Shirazi, and the rest of the poems address historical topics. In Turkey's textbooks, poems are often presented more distinctly separately from the prose, whereas in Iran's textbooks, poems are presented both separately under a heading and within the prose without a specific title. The arrangement of poems used in Turkey's textbooks is more balanced across grade levels compared to Iran's textbooks. The poems used in Iran's textbooks carry more diverse values than those in Turkey's textbooks. The most common values found in poems in both countries' textbooks are similar.

Recommendations

In order to increase the effectiveness and permanence of the subject and to make the lesson attractive and more enjoyable while teaching historical subjects, literary products (poems) of the period discussed can be included. (Cantürk & Yeşiltaş, 2022; Kaymakcı et al., 2021). It has been observed that this approach is frequently applied in Iran textbooks. Although it is seen that Türkiye textbooks seldom include poems related to recent history (e.g., Mehmet Akif Ersoy's poem on the Gallipoli Martyrs), it is observed that poems are not used when dealing with other historical periods. Based on this result, it can be suggested that it would be appropriate to use historical poems to increase the effectiveness and permanence of the subject and to make the lesson attractive and enjoyable while dealing with historical subjects in social studies courses.

Building upon the finding that verses from poems are interspersed among plain texts in Iran textbooks to support the content, it is recommended that studies be conducted to explore the appropriateness, effectiveness, ease, and other aspects of incorporating excerpts from poems that enhance the meaning between plain texts in textbooks.

In general, it is seen that the values found in the VRF have a parallel distribution in the Türkiye and Iran social studies textbooks with a few exceptions. It is recommended that research be conducted to understand the reasons behind this similarity. In other words, it is suggested to investigate whether this similarity is a result of the common and multifaceted interaction between Türkiye and Iran, rooted in historical processes (cultural, political, economic, and security), or whether it is a consequence of the global understanding of social studies education.

Compliance with Ethical Standard

During the writing process of this study, scientific, ethical and citation rules were followed; no falsification was made on the collected data.

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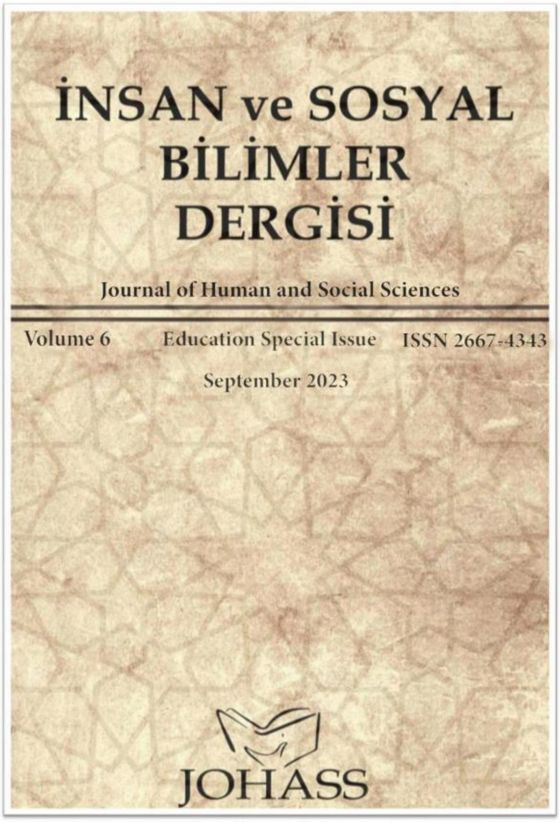

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Psychological Well-Being Levels of Social Studies Teachers During the Pandemic Process*

**These research data were presented as an oral presentation at the 3rd International Young Researchers Student Congress and received the best second presentation prize.*

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Psychological Well-Being Levels of Social Studies Teachers During the Pandemic Process*

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Abstract **Research Article**

Education in Türkiye faced disruptions because of the Covid-19 pandemic, just like many other global instances. Many people were confined to their homes to avoid transmitting the virus. School education was suspended for an extended period and shifted to online platforms. During this process, teachers played a vital role in ensuring the healthy continuation of education and maintaining student motivation. Concurrently, they worked with others in society to mitigate the pandemic's adverse effects on education and life. Teachers' efforts relate to the concept of psychological well-being (PWB). The objective of our research was to assess the PWB of Turkish social studies teachers amidst the pandemic. Utilizing a correlational survey methodology, voluntary responses were received from 161 social studies educators across Türkiye. Information was gathered through the Psychological Well-being Scale (PWBS) and a demographic details form. Findings indicated that there was negligible variation in teachers' PWB based on age and gender. However, a significant difference emerged based on professional seniority.

Keywords: Pandemic, education, social studies, teachers, psychological well-being (PWB)

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Introduction

Humanity has faced many epidemics throughout history. Epidemic disease refers to the rapid spread of a particular disease among a group of people (Republic of Türkiye Ministry of Health, 2020; Turkish Language Institute [TLI], 2021). Unlike conventional pandemics, Covid-19 has crossed continents in transmission. The World Health Organization (WHO) first classified the outbreak, which began with the Covid-19 virus on January 30, as a public health emergency. With the continuous spread of the virus on a global scale, WHO declared a global pandemic on March 11, 2020 (WHO, 2020). On the very same date, Türkiye started to work within the scope of the pandemic measures. The Scientific Advisory Board of the Ministry of Health held meetings and took measures (Republic of Türkiye Ministry of Health, 2021). The virus causing the disease spread rapidly due to human mobility despite the precautions taken in the process.

After Türkiye's initial Covid-19 diagnosis on March 11, 2020, a quick decision halted academic activity in all institutions. The pandemic prevented a prompt return to classrooms. To ensure uninterrupted learning, alternative online teaching methods were introduced (Eken et al., 2020). As of March 16, 2020, the education process at schools, which was suspended, was continued with the television channels prepared in accordance with the educational content and the distance education system created through EIN (Education and Information Network [EBA]) as the number of COVID cases increased (Ministry of National Education [MoNE], 2020).

As distance education became prevalent amidst this health crisis, educators encountered various challenges. Some of these problems include not having the necessary knowledge to prepare content for the distance education system, technical difficulties, the intertwining of home and work life with home education (Karadeniz & Zabcı, 2020), lack of infrastructure, system access problems, problems with the EIN platform (Demir & Özdaş, 2020; İmamoğlu & Siyimer İmamoğlu, 2020), students' loss of motivation and health problems (Fidan, 2020), and the lack of emotional transfer, communication and interaction (Balaman & Hanbay Tiryaki, 2021). Additionally, teachers who were away from their classrooms and learners grappled emotional difficulties of the process, e.g. longing, anxiety and grief. In addition, the uncertainties and changing programs in the process and the high expectations of parents have increased the stress level of teachers (Karadeniz & Zabcı, 2020).

As Huppert (2009) notes, there is not always happiness and well-being in life. There are also current and past experiences that cause pain. Experiences related to these experiences should be managed effectively as a natural part of the PWB process. Continuous negative emotions affect daily life after a while. If this situation is not managed well, it negatively affects the PWB of the individual. Therefore, the teacher’s ability to cope with the negativities experienced during the pandemic process is closely related to PWB. PWB is the state of having the necessary struggle determination and strength to establish a delicate balance between life concerns and social interests and to use one’s potential in this regard effectively (Ryff, 1989). Satisfaction with life and the meaning it adds to life are explained by an individual’s PWB (Arslan & Tura, 2022).

Ryff’s (1989) Multidimensional Psychological Well-Being Model is a helpful benchmark for examining an individual’s PWB. This model has six dimensions: Environmental Mastery, Positive Relationships with others, Self-Acceptance, Personal Growth, Autonomy and Purpose in Life. Ryff (1989) briefly explains these dimensions, which are very important in the PWB of the individual (p.1071):

Environmental Mastery: It pertains to the capability of selecting or shaping one’s environment that align with this individual's psychological state, and to change the world in which he/she lives through mental and physical activities.

Positive Relationships with others: It is the ability of an individual to establish loving, secure, positive relationships with other people around him/her. Such people usually have empathy, friendship and compassion towards others.

Self-Acceptance: Self-acceptance refers to the development of positive feelings towards oneself and acceptance of one's past life, friendship and compassion.

Personal Development: It is the realization of one’s own potential, being open and willing to experiences for self-improvement and continuing to develop one's potential.

Autonomy: The ability to control one's own behavior without being subjected to environmental impositions, independence, self-regulation and evaluation.

Purpose in Life: It involves an individual's assimilation of beliefs that instill direction and meaning in life.

All these dimensions express the characteristics related to PWB of a person. An individual’s PWB plays an important and guiding role in working life. At the same time, people who live a productive and functional life in their working life have a high level of PWB (Demirci & Şar, 2017). Therefore, PWB affects teachers to maintain their working life efficiently and functionally. For a superior educational experience, educators need to have a high level of PWB for a quality education process (Telef, 2013). Since 2020, it is thought that the negativities of the pandemic process we have experienced have affected teachers in terms of PWB. Concluding this phase, assessing the PWB status plays a crucial role in ensuring educator wellness and enhancing effective educational practices.

There are many scientific studies in which PWB is studied in terms of different predictors (Palak & İra, 2022; Kındıroğlu & Yaşar Ekici, 2019; Sezer, 2022; Zhao, 2023). These research identified a strong correlation between one's PWB and their personal development, which establishes positive relationships with other people (Göcen, 2019); self-efficacy (Cansoy et al., 2020); values such as achievement, self-direction, compliance and security, benevolence (Telef et al., 2013); positive leadership perception (İnce & Demirhan, 2022); perception of managerial support (Ertürk et al., 2016); discovering life's meaning and purpose, orientation towards personal development, social support (Arslan & Tura, 2022); perception of success, academic optimism, physical self-esteem (Karaçam & Pulur, 2019) and psychological resilience (Başaran et al., 2020; Kımter, 2020). The acquisition of all these elements, skills and values that support the PWB of the person occurs significantly in the education process. Many contents that support the PWB are included in the scope of social studies education.

Social studies education aims to educate the individual as a whole with his/her material and spiritual orientations. The development of many qualities that support PWB such as effective communication, self-confidence, empathy, self-esteem, self-respect, and willpower is realized within the scope of social studies (Ersoy, 2021; MoNE, 2023). Considering the many negative experiences of the pandemic process, the PWB level of social studies teachers in the field of social science education are the central subject of our research. Our research aims to interrogate how the mental health of social studies educators fluctuated during the pandemic, considering different factors. The difficulties of the pandemic process for teachers, the lack of a study on PWB, which is extremely important in coping with these difficulties, and the importance of PWB in education made this research considerably necessary. Along with making an original contribution to the literature on the subject, the study may contribute to the Ministry of National Education in its decisions to be taken in possible future pandemics by presenting data collected during the pandemic process. The research is also expected to form the basis for replication studies after the pandemic. The research question is as follows: Do factors like age, gender, and years in the profession lead to significant differences in the PWB of social studies teachers, and how do these variables influence their PWB levels?

Hypotheses

During the pandemic,

1. The PWB scores of teachers in social studies are elevated based on the overall score and their total sub-scale scores.
2. The PWB levels of teachers in social studies differ significantly based on gender.
3. The PWB levels of teachers in social studies differ significantly based on age.

4. Professional seniority impact the PWB levels of teachers in social studies significantly.

Each stated hypothesis was evaluated both for the overall scale and for its specific sub-dimensions (environmental mastery, Positive Relationships with others, self-acceptance, personal development, autonomy, purpose in life).

Method

Model

The study utilized a survey model with the objective of assessing the levels of psychological well-being among social studies teachers who remained active in their profession throughout the pandemic. Furthermore, the research intended to determine if significant differences were present in the PWB scores of social studies teachers, based on variables such as gender, age, and professional seniority (Tekbıyık, 2014).

Sample and Population

Research participants were social sciences teachers from middle schools throughout the country. Our subset for investigation specifically targeted teachers in social studies, selected based on specific criteria from the purposeful sampling approach. The specialization of these teachers and their active engagement during the health crisis set the criteria for inclusion. A total of 161 social studies teachers from middle schools across Türkiye participated voluntarily in the online platform. Given that the number of participants was eight times greater than the number of scale items, and considering that a sample size ranging from 30 to 500 has been deemed sufficient in numerous studies for explaining the research, the participation of 161 voluntary social studies teachers was considered adequate (Büyüköztürk et al., 2011). The characteristics of social studies teachers who voluntarily participated are given in Table 1.

Table 1

Demographic Profiles of Participating Social Studies Teachers

Variables		*n*	%
Gender			
	Female	77	47,8
	Male	84	52.2
Age			
	21-27 years old	43	26,71
	28-34 years old	47	29,19
	35-41 years	39	24,22
	42-48 years old	25	15,53
	49 and above	7	4,35

Professional seniority		
1-5 years	72	44,7
6-10 years	33	20,5
11-15 years	22	13,7
16-20 years	15	9,3
21 and above	19	11,8
TOTAL	161	100

Data Collection Tools

Personal Information Form: The form includes queries formed by the researchers to gather personal information from teachers in social studies involved in the research. There are three items and sub-options of these items prepared to determine the information about the gender, age and professional seniority of the teachers.

Psychological Well-Being Scale (PWBS): Created by Ryff (1989) to evaluate individual PWB, this instrument was employed to ascertain the SWB levels of educators. The scale's original version encompasses six dimensions, with 14 items in each, totaling 84 items. The scale was revised by Ryff and Keyes (1995) to increase the usefulness of the scale and a short form was created. Adapted into Turkish by Akın (2008), Cenkseven (2004) and İmamoğlu (2004), the scale demonstrated high validity and reliability in both its original and adapted versions. Akın (2008) explained the internal consistency values of the scale sub-dimensions with values ranging from .87 to .96. Cenkseven (2004) averred that the reliability values of the scale in its original form ranged between .83 and .91. In the adaptation study, he reported internal consistency values of .93 for the overall scale, with values between .74 to .83 for its individual components. In validity studies, each sub-dimension provided a significant correlation at .01 level with the whole scale. İmamoğlu (2004) reported the Cronbach Alpha value of the scale as .79 and Yeniçeri (2013) as .69. In the current study, Cronbach's Alpha value was .68 for the whole scale. This value ranged between .632-.704 for the sub-dimensions of the scale (environmental mastery .632, Positive Relationships with others .703, self-acceptance .633, personal development .704, autonomy .659, purpose in life .634). The scale, adapted into Turkish by İmamoğlu (2004), comprises 18 items across 6 dimensions and can be utilized with either a 5-point or 7-point Likert type. This tool was employed for data collection in this study after securing the required permissions from the researcher and obtaining ethics committee approval from MAKU Non-Interventional Clinical Research Ethics Committee, under the decision number 2021/259 dated 02.06.2021.

Data Collection Process

Prior the process of collecting the research data, ethics committee approval was obtained and the PWBS was digitized by moving the scale into an online platform. The invitation to participate in the study was shared on various social media platforms where social studies teachers were present. Teachers were encouraged to join the study during their free time, so as not to disrupt education. Volunteer social studies teachers were first given general information about the study online. Participants' personal information was kept confidential. Teachers were not asked for their names during the research. Each teacher's response was coded as K1, K2. From the reliability analysis of the gathered data, a Cronbach Alpha value of 0.686 was determined.

Data Analysis

Prior to conducting the analyses for the study, the dataset was meticulously scrutinized for any missing or erroneous entries. Upon review, it was determined that the dataset was complete and free from errors, thereby making it suitable for further analysis. The quantitative data, collected from participants' responses via the PWBS in a digital format, were processed using IBM SPSS Statistics 26 software. The Cronbach's Alpha coefficient was computed to assess the scale's reliability. While the assumption of normal distribution necessitates that significant values should exceed 0.05 as per the normality test, this criterion was not met in the present data. As a result, non-parametric tests were used, with the Mann-Whitney U test serving as a substitute for the T-test and the Kruskal-Wallis test replacing ANOVA.

Compliance with Ethical Standard

The ethical approval for this research was granted by the Non-Interventional Clinical Research Ethics Committee of Burdur Mehmet Akif Ersoy University, with the decision number GO 2021/260 on June 2, 2021.

Findings

The findings identified in this study, which examines the psychological well-being levels of social studies teachers, are presented below.

Findings on Social Studies Teachers' Level of PWB

Based on the main research question, the findings concerning the PWB levels of social studies teachers during the pandemic period are given in Table 2.

Table 2

Scores Related to the PWB Levels of Social Studies Teachers During the Pandemic Period

Scale Subdimension	Mean score	Standard deviation	Number of participants
Autonomy	13,9255	2,28734	161
Environmental Mastery	13,8944	2,10239	161
Purpose in Life	10,1988	2,17319	161
Self-Acceptance	12,3540	2,38068	161
Positive relationships with others	9,6584	1,92063	161
Personal growth	14,2609	1,83208	161
PWBS Total Score	74,2919	6,46784	161

Lowest and highest total scale score = 18-126
Lowest and highest mean score from the subscale = 3-21

The total score in Table 2 can be considered high for the PWB levels of social studies teachers during the pandemic period since the mean score is 74.29 points, which is near the maximum score achievable on the scale. Thus, it can be stated that the study's initial hypothesis is confirmed. However, the noticeably high standard deviation in the total score indicates that the PWB levels of the participating social studies teachers may have varied among the teachers. A detailed analysis within the context of the scale's subdimensions illustrates that the social studies teachers recorded the lowest average score of 9.65 in the 'Positive Relationships with others' category, compared to the average scores of other dimensions related to PWB. Conversely, the highest average score was registered at 14.26 in the 'Personal Development' category. Therefore, in relation to the pandemic period, social studies teachers scored higher in the 'Personal Development' subdimension and lower in the 'Positive Relationships with others' subdimension compared to the other dimensions of the scale.

Findings on Gender Differences in the PWB of Social Studies Teachers

In light of the study's second hypothesis, findings related to whether there is a significant difference in the PWB levels of social studies teachers during the pandemic, based on the gender variable, are presented in Table 3.

Table 3

Mann-Whitney U Test Assessing Gender Differences in PWB among Social Studies Teachers During the Pandemic

	Autonomy	Environmental mastery	Purpose in life	Self-acceptance	Positive relationships with others	Personal growth	Total score
Mann-Whitney U	3006,000	3143,000	3159,000	2792,000	2832,500	2691,500	3219,500

Wilcoxon W	6009,000	6146,000	6162,000	5795,000	6402,500	6261,500	6222,500
Z	-,785	-,314	-,258	-1,514	-1,390	-1,884	-,049
Asymp. Sig. (2-tailed)	,432	,754	,797	,130	,165	,060	,961

a. Group variable: Gender

The figures in Table 3 related to the entire scale and all subdimensions show that there is no significant difference between teachers' PWB and the gender variable; thus, the second hypothesis has been rejected. From these results, it is evident that the PWB levels of social studies teachers during the pandemic are not significantly influenced by gender. Mean scores of the scale's subdimensions are given in Table 4.

Table 4

Mean PWB Scores of Social Studies Teachers by Gender During the Pandemic

Scale subdimension	Gender	N	Mean score
Autonomy	Female	77	78,04
	Male	84	83,71
Environmental Mastery	Female	77	79,82
	Male	84	82,08
Purpose in Life	Female	77	80,03
	Male	84	81,89
Self-acceptance	Female	77	75,26
	Male	84	86,26
Positive relationships with others	Female	77	86,21
	Male	84	76,22
Personal growth	Female	77	88,05
	Male	84	74,54
PWBS Total score	Female	77	80,81
	Male	84	81,17
	Total	161	78,04

Lowest Possible Total Score from the Scale= 18
Highest Possible Total Score/Full Score from the Scale= 126

Data in Table 4, related to the mean scores according to the gender variable, show that men have higher scores than women in the following subdimensions: Autonomy with a score of 83.71, Environmental Mastery with 82.08, Purpose in Life with 81.89, and Self-Acceptance with 86.26. Conversely, women scored higher than men in the Positive Relations with Others subdimension with 86.21, and in the Personal Growth subdimension with 88.05. Regarding the total score on the PWBS, it is possible to say that men have a higher score by a difference of 0.36 points compared to women. However, this difference did not yield a statistical difference.

Findings on Age-Related Differences in the PWB of Social Studies Teachers

Aligning with the study's third hypothesis, Table 5 presents findings on age-related differences in the PWB levels of social studies teachers during the pandemic.

Table 5

Kruskal-Wallis Test Assessing Age-Related Differences in PWB among Social Studies Teachers during the Pandemic

	Autonomy	Environmental mastery	Purpose in life	Self-acceptance	Positive relationships with others	Personal growth	Total score
Kruskal-Wallis H	9,145	3,690	1,674	6,480	3,224	2,371	7,074
df	4	4	4	4	4	4	4
Asymp. Sig.	,058	,450	,795	,166	,521	,668	,132

a. Group variable: Age

Table 5 reveals no statistically significant differences in PWB levels among social studies teachers based on age, thereby rejecting the third hypothesis. Thus, age does not appear to influence the PWB of social studies teachers during the pandemic. Ranked mean scores for different age groups are provided in Table 6.

Table 6

Mean PWB Scores of Social Studies Teachers, Stratified by Age during the Pandemic

Scale subdimension	Age	N	Mean Score	Scale subdimension	Age	N	Mean Score
Autonomy	21-27	42	67,29	Self-acceptance	21-27	42	65,65
	28-34	48	92,29		28-34	48	86,18
	35-41	39	80,37		35-41	39	86,95
	42-48	27	77,43		42-48	27	87,56
	49-+	5	112,00		49-+	5	78,40
	Total	161			Total	161	
Environmental mastery	21-27	42	82,13	Positive relationships with others	21-27	42	77,29
	28-34	48	78,23		28-34	48	80,80
	35-41	39	79,56		35-41	39	90,53
	42-48	27	79,24		42-48	27	71,87
	49-+	5	118,80		49-+	5	89,10
	Total	161			Total	161	
Purpose in life	21-27	42	74,38	Personal growth	21-27	42	77,13
	28-34	48	82,29		28-34	48	86,71
	35-41	39	86,73		35-41	39	84,60
	42-48	27	82,15		42-48	27	74,22
	49-+	5	73,30		49-+	5	67,20
	Total	161			Total	161	

PWBS Total score	21-27	42	66,35
	28-34	48	88,00
	35-41	39	88,94
	42-48	27	77,15
	49-+	5	95,80
	Total	161	

Lowest possible total score from the scale = 18
Highest possible total score/Full score from the scale = 126

Table 6 comprehensively presents age-stratified responses from social studies teachers across various PWB subdimensions. Teachers aged 49 and above obtained the highest mean scores in Autonomy (112.00) and Environmental Mastery (118.80). The age group 35-41 achieved the highest mean scores in Purpose in Life (86.73) and Positive Relationships with others (90.53). The 42-48 age group scored highest in Self-Acceptance (87.56), while the 28-34 age group led in Personal Growth (86.71). The highest total scale score (95.80) was recorded among teachers aged 45 and above.

The findings suggest that the age variable does not create a significant difference in the PWB levels of social studies teachers. However, considering the total scores from the scale and the mean scores of the subdimensions, it is observed that social studies teachers aged 21-27 have lower mean scores in the PWB scale compared to other age groups.

Findings on Professional Seniority-Related Differences in the PWB of Social Studies Teachers

Aligning with the study's fourth hypothesis, Table 7 presents findings on professional seniority-related differences in the PWB levels of social studies teachers during the pandemic.

Table 7

Kruskal-Wallis Test Assessing Professional Seniority-Related Differences in PWB among Social Studies Teachers during the Pandemic

	Autonomy	Environmental mastery	Purpose in life	Self-acceptance	Positive relationships with others	Personal growth	Total score
Kruskal-Wallis H	1,702	4,946	15,331	11,241	11,039	3,539	15,493
df	4	4	4	4	4	4	4
Asymp. Sig.	,790	,293	,004	,024	,026	,472	,004

a. Group variable: Professional seniority

Table 7 indicates a significant relationship between PWB and professional seniority across the scale as a whole. Subdimensional analysis reveals significant disparities in 'Purpose in Life,' 'Self-Acceptance,' and 'Positive Relationships with others,' but not in 'Autonomy,' 'Environmental Mastery,' or 'Personal Growth.' Given the significance level below 0.05, the fourth hypothesis is confirmed.

The data in Table 7 substantiate that professional seniority significantly influences the PWB of social studies teachers during the pandemic. Notably, significant disparities exist in the 'Purpose in Life,' 'Self-Acceptance,' and 'Positive Relationships with others' subdimensions. Ranked mean scores for groups with differing professional seniority are listed in Table 8.

Table 8

PWB Scores of Social Studies Teachers by Professional Seniority during the Pandemic

Scale subdimension	Professional seniority	N	Mean score
	1-5 years	72	67,65
	6-10 years	33	97,97
Purpose in life	11-15 years	22	82,70
	16-20 years	15	106,73
	Over 21	19	79,82
	Total	161	
	1-5 years	72	67,91
	6-10 years	33	96,88
Self-acceptance	11-15 years	22	88,84
	16-20 years	15	86,70
	Over 21	19	89,45
	Total	161	
	1-5 years	72	72,65
	6-10 years	33	97,56
Positive relationships with others	11-15 years	22	72,50
	16-20 years	15	102,50
	Over 21	19	76,74
	Total	161	
	1-5 years	72	68,11
	6-10 years	33	100,35
PWBS Total score	11-15 years	22	79,61
	16-20 years	15	105,60
	Over 21	19	78,42
	Total	161	

Lowest possible total score from the scale = 18
Highest possible total score/full score from the scale = 126

As illustrated in Table 8, the overall scores on the PWB Scale (PWBS) for social studies teachers are notably diminished in the initial years of their career, as opposed to subsequent years. Specifically, teachers with 1-5 years of professional seniority exhibit the lowest mean scores in 'Purpose in Life' (67.65) and 'Self-Acceptance' (67.91) subdimensions.

Conversely, teachers within the 16-20 years of seniority bracket attain the highest mean score in 'Purpose in Life' (106.73), and those with 6-10 years in 'Self-Acceptance' (96.88). In the 'Positive Relationships with others' subdimension, educators with 1-5 years of seniority score lower (72.65) compared to their counterparts with 6-10 years (97.56). The data further elucidate that the lowest overall score (68.11) corresponds to teachers within the 1-5 years seniority range, whereas the highest overall score (105.60) is associated with those having 16-20 years of seniority.

Discussion and Results

This study has investigated the psychological well-being of social studies teachers during the pandemic. In addition to assessing scores obtained from the PWBS, the study probes the statistical significance between PWB and demographic variables such as gender, age, and Professional Seniority. Results have revealed that the mean PWB level of social studies teachers during this pandemic era is above the scale's average. No statistically significant differences were discerned concerning gender and age variables. A notable variance, however, was evident in relation to Professional Seniority, where teachers with 16-20 years of Professional Seniority have a higher level of PWB during the pandemic compared to other seniority groups.

The total PWBS score for the participating social studies educators stands at 74.29, which is deemed significantly above average vis-à-vis the scale's maximal score of 126. This substantiates the first hypothesis of the study, indicating an above-average level of PWB among social studies teachers during the pandemic. This aligns with previous research by Cansoy et al. (2020), Lipińska-Grobelny and Narska (2021), and İnce and Demirhan (2022) and Neyişci and Yılmaz (2022), all of whom corroborate elevated PWB levels among educational professionals. Karadeniz and Zabcı (2020) further add nuance by illustrating that elementary teachers experience significantly higher stress levels than high school teachers, whilst preschool educators manifest markedly elevated well-being levels. All these studies, along with some other existing studies (Warrier et al., 2021; Zakaria et al., 2021), corroborate our findings. However, a study conducted by Onuray Eğilmez (2022) found that teachers scored below average in terms of PWB. This is thought to be due to the fears teachers experienced during the pandemic period.

The social studies teachers scored the lowest on the ‘Positive Relationships with others’ sub-dimension and the highest on the 'Personal Growth' sub-dimension, according to the average scores from the PWBS. This aligns with Göcen’s (2019) study, which identified a significant high-level relationship between these two sub-dimensions and overall PWB. However, the scores related to the 'Purpose in Life' and 'Positive Relationships with others' sub-dimensions were found to be below the average achievable score for these categories. This draws attention to challenges in teachers’ purpose in life and relationships during the pandemic. The amalgamation of work and home environments during the pandemic, coupled with the stress of infection risk and social restrictions, likely negatively affects teachers’ sense of purpose and relationships.

Arslan and Tura (2022) have found a positive relationship between teachers' PWB and their life purposes. Warrier et al. (2021) found that autonomy, self-acceptance, and positive relationships with people; Nika and Bashir (2023) determined that environmental mastery, autonomy, and self-acceptance sub-dimensions contributed more to PWB. Ünal and Dulay (2022) highlighted the disbalance in work-life equilibrium during the pandemic, underscoring the difficulty teachers face in maintaining this balance. Koçyiğit and Yılmaz (2023) discovered a decrease in life satisfaction among teachers, attributing it to ‘Zoom fatigue’ induced by remote teaching. All these factors potentially undermine teachers’ psychological resilience, reducing their coping abilities and diminishing their scores in life purpose. According to Güler and Yöndem (2021), when psychological resilience levels drop, individuals’ capacity to cope with challenges wanes, and burnout levels increase. McMakin et al. (2022) spotted a low level of secondary traumatic stress and a moderate level of burnout among teachers during this period. Although our study does not delve into the trauma aspect, the low scores indicate that further scrutiny is warranted concerning the impact of the pandemic on teachers' life purposes and relationships.

The tests conducted in accordance with the study’s second hypothesis have revealed that gender does not significantly affect PWB across all sub-dimensions and the scale as a whole. There is no significant difference between genders in terms of PWB. This result aligns with studies that indicate no variation in teachers’ PWB based on gender (Arslan & Tura, 2022; Yakut & Yakut, 2018). Also, many more studies confirming the conclusion that the gender variable does not affect the PWB of teachers (Katsantonis, 2020; Singh & Sharma, 2023; Onuray Eğilmez, 2022; Warrier, 2021). However, there are alternative studies asserting that the gender factor does influence teachers’ PWB (Cenkseven & Akbaş, 2007; Doğan &

Aslan, 2022). For instance, Ertürk et al. (2016) identified a significant difference in PWB between teachers of different genders, noting higher scores for female teachers compared to males. In contrast, Şerbetçioğlu (2019) discovered that male teachers had higher average scores in PWB compared to female teachers. Additionally, Stapleton (2022) reported that men were better at coping with problems. Therefore, while the current study suggests gender neutrality in PWB among teachers, it is essential to acknowledge the varying perspectives presented in the existing literature.

Tests carried out following the study’s third hypothesis indicate that neither the sub-dimensions nor the overall scale reveal a significant effect of age on PWB. Among the participating social studies teachers, no significant difference is found in PWB during the pandemic based on age. This finding diverges from the study by Ertürk et al. (2016), which identified significant differences in teachers' PWB across age groups. That study found higher PWB values for teachers aged 30 and below compared to those 41 and above. Stapleton (2022) also reported that individuals between the ages of 25-42 were better at coping with psychological issues compared to those aged 45 and above.

In contrast, tests aligned with the study's fourth hypothesis have concluded that both the sub-dimensions and the overall scale reveal a significant effect of Professional Seniority on PWB. A significant difference in the PWB levels of participating social studies teachers during the pandemic is observed based on their Professional Seniority, thereby confirming the fourth hypothesis. A study by Karadeniz & Zabcı (2020) found that as teachers' Professional Seniority years increased, their levels of PWB also rose. According to the study, teachers with greater Professional Seniority experienced reduced stress perceptions and fewer negative emotions. Especially teachers with 11 or more years of Professional Seniority appeared to handle challenges more calmly. The study suggests that these teachers' experiences significantly contribute to this outcome. However, in contrast to these findings, Doğan and Aslan (2022) and Ertürk et al. (2016) found no significant difference in teachers’ PWB based on Professional Seniority.

Recommendations

From the insights gained in studying the PWB levels of social studies teachers during the pandemic from multiple angles, the following suggestions can be emphasized: Initially, the study’s sample is limited to social studies teachers. Therefore, researchers could consider examining the PWB levels of teachers from different disciplines in post-pandemic periods as well. Additionally, a quantitative study was preferred in this study has investigated the relationships between PWB and variables like gender, age, and professional seniority. Future research could focus on different variables and qualitative details related to teachers' PWB.

Moreover, the research indicates that professional seniority is an effective variable in PWB. Thus, institutions engaged in educational research, led by the Ministry of National Education and faculties of education, could organize developmental activities related to sharing professional experience among teachers and prospective teachers. For example, activities could include tea-time chats between novice and experienced teachers, inviting a veteran teacher to the school for discussions, conducting Zoom meetings, teacher conferences, or hosting a senior teacher in the faculty to meet with teacher candidates.

Next, given the below-average scores in the ‘Purpose in Life’ and ‘Positive Relationships with others’ dimensions, and their importance in human life, motivational enhancing activities could be designed for teachers. For instance, initiatives like social activities, psychological support, hobby creation, and rewards for social projects could provide the necessary support. Finally, education policymakers could consider launching projects focused on enhancing the quality of education and teachers, evaluating different planning and support proposals aimed at increasing teachers' PWB.

Compliance with Ethical Standard

The ethical approval for this research was granted by the Non-Interventional Clinical Research Ethics Committee of Burdur Mehmet Akif Ersoy University, with the decision number GO 2021/260 on June 2, 2021.

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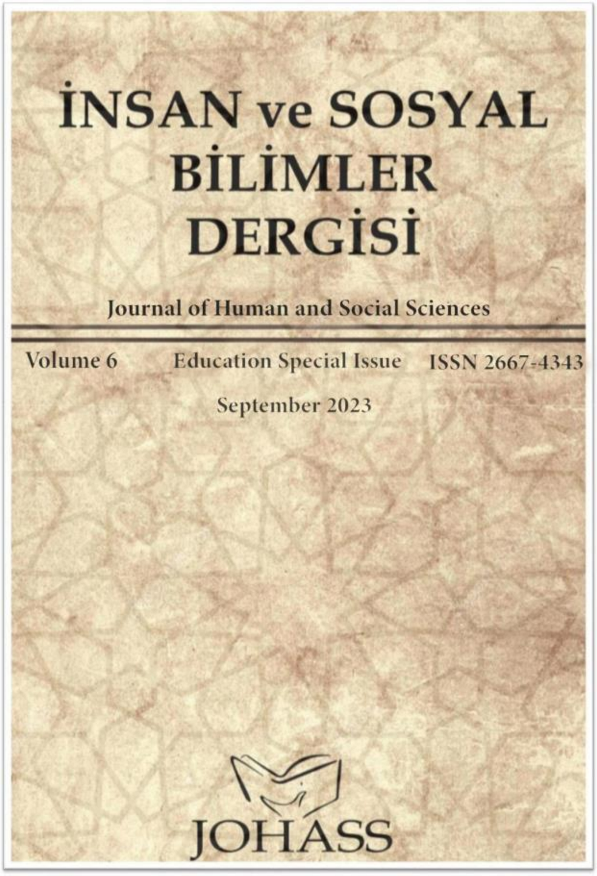

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Thematic Analysis of Theses on Distance Education in Science Education

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Thematic Analysis of Theses on Distance Education in Science Education

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Abstract

Researchle Article

The aim of the study is to analyze the postgraduate theses in the field of science education within the scope of distance education. The document analysis method was used in this study, adopting a qualitative approach. Within the scope of the research, 50 theses that are suitable for the purpose reached by YÖK National Thesis Center with the words "distance education" and "science" constitute the documents of the study. The theses were coded according to type, research approach, sample, data collection tools, and data analysis methods and then subjected to descriptive analysis by determining their frequencies and percentages. As a result of the research, it was concluded that the theses examined were mostly master's theses; nearly 50% of them used qualitative research methods. In addition, "teachers" were mainly preferred as the sample. Also, concerning the chosen research design, the data collection tools, and data analysis methods were appropriately selected.

Keywords: Distance education, science education, thematic analysis

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Introduction

On March 11, 2020, after COVID-19 was declared as a pandemic by the World Health Organization (URL-1), unexpected developments in education were experienced worldwide, as in many areas. It has been reported that the rate of spread of COVID-19 has been described as extremely fast and has caused significant economic hardship (Briggs et al., 2020). In countries around the world, it was found that the only way to stop the spread of COVID-19 infection was to stay at home and avoid social gatherings following social distancing (Madurai-Elavarasan & Pugazhendhi, 2020). Therefore, educational activities have also been disrupted. In line with the principle that education is a fundamental human right, many educational institutions have used emergency remote education (ERE) applications worldwide to compensate for the education interrupted due to the pandemic (Bozkurt, 2020). Due to the Presidential cabinet meeting on March 12, 2020, Turkey decided to continue education with distance education methods in educational institutions affiliated to the Ministry of National Education (URL2, 2020). Similarly, the Council of Higher Education made a press release and started distance education in all universities on March 25, 2020 (URL2, 2020).

During the COVID-19 pandemic, students across the globe were required to shift from in-person learning to virtual learning. According to a study by Salend (2020), the shift to distance learning resulted in students having difficulty accessing their virtual classrooms, lacking personal interactions and support, and teachers not being able to provide adequate oversight and accountability of their students. The COVID-19 pandemic has brought to light the need to provide students in general education with access to virtual learning and to provide teachers and students with the knowledge and support that they need to make the most of this kind of learning (Gifford, 2020). Learners have greater educational flexibility and access to academic materials, thanks to the recent spike in the popularity of online learning as an essential component of today’s educational environment. Gifford (2020) noted that this trend has been largely attributed to the advent of recent technological advances.

Meanwhile, many students, parents, and instructors have found the rapid change to distance learning due to the COVID-19 epidemic to be challenging. This quick transition to studying via distant means has substantially influenced pupils’ learning. Disadvantages included learning loss, lack of student participation and engagement, students’ mental health, inequities caused by digital divide, learning loss, lack of training for students, social and emotional concerns, social skills, and lack of teacher preparedness (Garcia, 2023). COVID-19 expedited the naturally occurring growth in distance education as brick-and-mortar institutions were forced to close their doors (Brashear & Thomas, 2020). To keep a level of normalcy, avoid interrupting students' academic plans and provide faculty and university administrators with continued employment, institutions shifted their instructional modalities to a fully online format (Thomaszek & Muchacka-Cymerman, 2022).

Within the scope of distance education, TV and internet-based distance education platforms have started to be actively used by providing lessons via EBA (Education Information Network), internet, TRT channel, and television (Özdoğan & Berkant, 2020). For schools affiliated to the Ministry of National Education, it is seen that ten different courses for primary and secondary school level and 22 different courses for high school level are carried out as distance education and TV support (Can, 2020). Notably, the courses generally consist of introductory courses (Turkish, Mathematics, Physics, Chemistry, Biology, etc.), and other courses (Painting, Music, Physical Education, Visual Arts, etc.) are not included in the application. During the pandemic, the transition of universities to distance education has been rapid. Of 189 universities, 121 (64%) switched to distance education on March 23, 2020, 41 (21.6%) on March 30, 2020, and 25 (13.2%) on April 6, 2020. In the 2019-2020 Spring semester, while the number of courses to be offered in higher education institutions was 736,341, 663,808 courses were offered with the transition to distance education, and 90.1% of the courses were offered through distance education (Dikmen & Bahçeci, 2020).

Educational processes, difficulties, and various experiences during the pandemic have been included in academic research and studies conducted after 2020 (Taşkın & Kuru-Çetin, 2021). The COVID-19 pandemic and subsequent physical distancing measures have created challenges for interdisciplinary researchers. It is crucial to find ways to continue interdisciplinary research in progress, to design research for pandemic management and to achieve significant outcomes. However, the pandemic also creates opportunities for new research projects and new research designs, but in order to evaluate these opportunities, existing research methodologies must be adapted and their applicability for new research must be determined (Sy et al., 2020).

In particular, considerations to keep in mind when designing interdisciplinary research during the pandemic include research ethics and integrity, research design, data collection methods, research opportunities, implications, and limitations (Çağlayan et al., 2022). The effects of COVID-19 may require interdisciplinary researchers to change their research methods. The shift to remote data collection may create the need to assess participants' ability to understand and use technological devices or applications. Online data collection methods, which were used in many quantitative research designs before physical distance measures came into effect, have become more preferred with the pandemic conditions. However, there are ways to reduce the challenges of physical distance and improve the diversity of tools to be used in research (Sy et al., 2020).

In this context, this study aims to reveal the trends in the research on education during the pandemic by conducting a thematic analysis of the theses and dissertations on distance education in Turkey after the pandemic period. It is thought that a holistic and systematic analysis of the different practices and perspectives that emerged in the field of education with the pandemic affecting the whole world can be a source of reference for research topics and methods in future studies. In this context, the main problem of the study was formed as "How is the analysis of science education thesis studies dealing with distance education approach in Turkey after the pandemic according to various variables?".

In this context, answers to the following research questions were sought within the framework of the problem addressed:

- How are the analyzed graduate theses distributed according to their types?
- Which research approach and sampling groups were preferred in the theses?
- Which data collection tools and data analysis methods were preferred in the theses?

Method

Research Model

The document analysis method, one of the qualitative research methods, was used in this study. Document analysis enables inferences to be made from written and visual materials (textbooks, program directives, in and out of school correspondence, student records, pictures, films, and articles, etc.) that contain information about the phenomena or events that are intended to be investigated (Yıldırım & Şimşek, 2011). The study examined postgraduate thesis studies in the field of science education that addressed the issue of distance education after the pandemic.

Data Collection Tool

The research classification form created by the researchers was used to analyze the theses in this study. The research classification form consists of fields covering the year the thesis was published, the type of thesis, the sample of the thesis, the data collection tools used in the thesis, the research method used in the thesis, and the data analysis methods used in the thesis. The studies were analyzed using the data obtained from this form.

Sample of the Study

The theses examined in the study were accessed by searching the keywords "distance education" and "science" in the National Thesis Center on the website of YÖK. In this context, a total of 50 theses, 47 master's and 3 doctoral theses, were selected for this study.

Data Analysis

The Microsoft Excel program was used to code the theses included in the study, which were coded separately. Theses were classified according to the type of thesis, the year the thesis was published, the sample of the thesis, the data collection tools used in the thesis, the research method used in the thesis, and the data analysis methods used in the thesis. The studies were analyzed according to descriptive analysis. Descriptive analysis is a type of qualitative data analysis that involves summarizing and interpreting the data obtained according to predetermined themes. Its purpose is to present the findings obtained in a summarized and interpreted form (Yıldırım & Şimşek, 2003).

Reliability and Validity

Since this study deals with theses accepted by the Council of Higher Education, it is assumed that theses are naturally valid and reliable. For the reliability of this study, two researchers worked independently, and the researcher took part in the data coding process. After the first coding, the inter-coder reliability coefficient was calculated as 91% according to Miles and Huberman formula. The study is reliable since this rate is above 70% (Miles & Huberman, 1994). The researchers then came together to compare their coding and agreed on the items that caused disagreement.

Findings

Distribution of Theses According To Their Types

The distribution of the theses examined within the scope of the research according to the status of master's and doctorate is given in Table 1.

Table 1

Types of Examined Theses

Types	f	%
Master	47	94%
PhD	3	6%
Total	50	100%

When the data in Table 1 are examined, it is concluded that 94% of the theses on distance education in the field of science education after the pandemic are master's theses. Only 3 of the analyzed theses were conducted within the scope of doctoral research.

Distribution of Theses According to Research Methods

The distribution of the research models used in the theses examined within the scope of the research is given in Table 2.

Table 2

Research Methods of Examined Theses

Methods	f	%
Qualitative	23	46%
Quantitative	16	32%
Mixed	11	22%
Total	50	100%

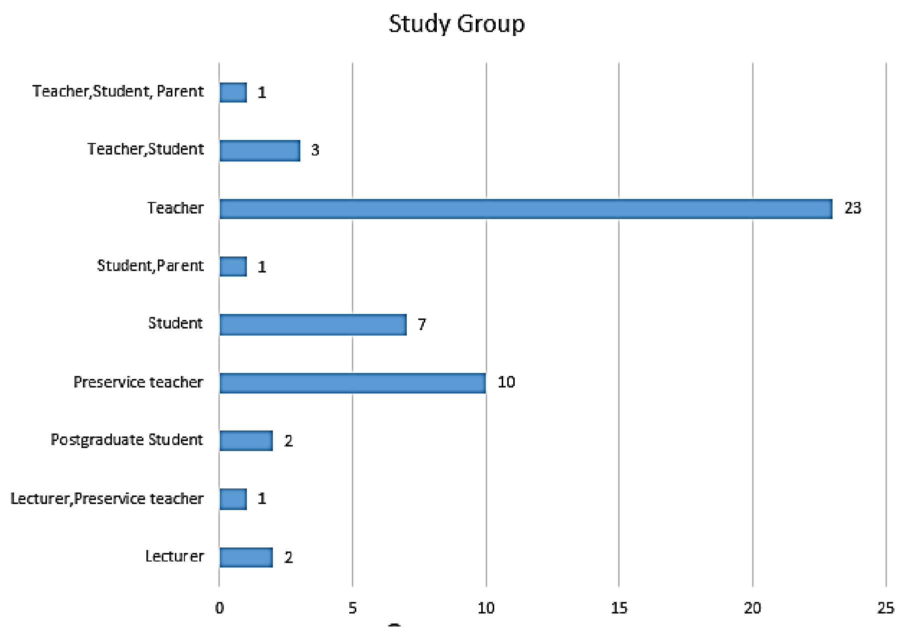
When the data in Table 2 are examined, it is seen that nearly half (46%) of the theses on distance education in the field of science education after the pandemic use qualitative research methods. There 32% theses that adopt a quantitative approach and 22% theses that use mixed methods.

Distribution of Theses According to Study Group

The distribution of the study groups in the theses examined within the scope of the research is given in Figure 1.

Figure 1

Study Group Distribution of Examined Theses



When the graph in Figure 1 is analyzed, it is seen that 46% of the theses on distance education in science education after the pandemic were conducted with teachers. Following these studies, pre-service teachers were studied in 10 theses and students in 7 theses. In 6 of the 50 theses examined, more than one type of study group was used (for example, teachers, students, and parents were studied).

Distribution of Theses According to Data Collection Tools

The distribution according to the data collection tools in the theses examined within the scope of the research is given in Table 3. Since more than one data collection tool was used in some theses, the total number of theses appears to be higher than the number of theses examined.

Table 3

Data Collection Tools of Examined Theses

Methods	f
Opinion forms	25
Scales	22
Achievement tests	6
Semi-structured interview	6
Survey	5
Diary	4
Presentation videos	1
Observation forms	1

When the data in Table 3 are analyzed, it is seen that opinion forms and scales were mainly used in theses on distance education in science education after the pandemic. Observation forms and presentation videos were used as data collection tools the least.

Distribution of Theses According to Data Analysis Methods

The distribution of data analysis methods in the theses examined within the scope of the research is given in Table 4. Since more than one data analysis method was used in some theses, the total number of theses appears to be higher than the number of theses examined.

Table 4

Data Analysis Methods of Examined Theses

Methods	f
Descriptive	40
Parametric tests	23
Content analysis	5
Nonparametric tests	4

When the data in Table 4 are examined, it is seen that descriptive analysis was used in almost all of the theses on distance education in the field of science education after the pandemic. It was determined that parametric tests (t-tests, ANOVA test) were used to a great extent in theses using quantitative or mixed methods. Content analysis and nonparametric tests were used the least.

Discussion and Results

This study conducted a thematic analysis of theses related to distance education in the field of science in Turkey after the COVID-19 pandemic, according to various variables.

According to the findings, 94% of the 50 theses examined were master's theses. This situation may be because there has not been enough time to complete long-term doctoral studies after the pandemic.

It was concluded that qualitative approaches were the most common, and mixed approaches were the least common in the analyzed theses. When it is considered that qualitative studies seek answers to the questions "Why?" and "How?" in addition to "What?" (Çepni, 2009), it can be said that trying to reveal opinions and detailed examinations with such approaches towards distance education is effective in explaining the background of the results obtained. In addition, survey studies were also found to be a significantly preferred approach. This enabled some general inferences to be made based on the results obtained by reaching a larger sample. Considering the strengths and weaknesses of both research methods, it can be said that the mixed method approach, which will help to build a bridge between qualitative and quantitative research (Baki & Gökçek, 2012; Onwuegbuzie & Leech, 2004), can shed light on educational research in reaching generalizations as well as understanding the nature of phenomena

In the studies examined in this study, it was seen that teachers were primarily preferred as the sample group. Then, students and prospective teachers constituted the group, while the least preferred groups were school administrators and parents. In contrast to the findings of this study, Çevik (2017) concluded that pre-service teachers were the most preferred sample group, followed by secondary school students. Similarly, Çevik (2017) stated that pre-school students were never used as a sample in his study. Similar to this study, the study conducted by Çavaş et al. (2020) determined that most of the studies were conducted with secondary school students as the sample group.

When an evaluation was made according to data collection tools, it was seen that scales and opinion forms were the most preferred tools. In contrast to this situation, Yaşar and Papatya (2015) concluded that achievement tests were used more in the postgraduate theses they examined. On the other hand, in the study conducted by Özarslan (2019), the most preferred data collection tool was an interview (interview), which overlaps with this study's result. In data analysis preferences, it was seen that qualitative analysis methods were preferred more than quantitative analysis methods in the theses examined within the scope of the research. Çavaş et al. (2020) concluded that the reason for the high preference for quantitative research methods in their research is parallel to the high use of parametric tests in data analysis methods.

Recommendations

In the light of the results obtained from this study, the following recommendations can be presented:

- Studies on distance education should also be examined for other disciplines other than science education.
- In addition to thematic analysis, comparative analyses can also be made regarding results.

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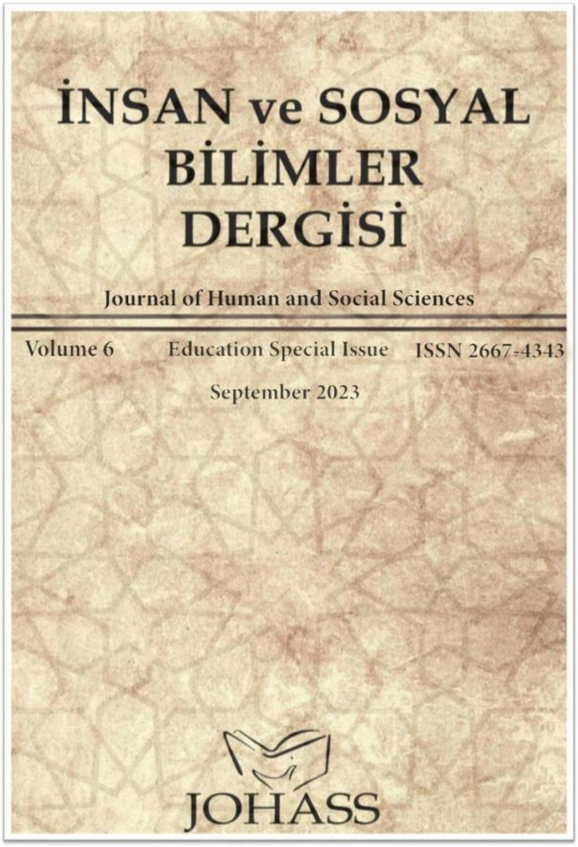

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The Use of Miniatures in Social Studies Lessons from the Perspective of Historical Literacy

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The Use of Miniatures in Social Studies Lessons from the Perspective of Historical Literacy

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Abstract **Research Article**

Various visual images are used in history teaching in social studies course. One of them is miniature. However, miniatures do not have meaning on their own. Their functions, meanings, periods and authors should be understood (Acun, 2004). This understanding is also possible with historical literacy. Because a student studying miniatures should have the skills of historical empathy, chronological thinking, understanding, interpreting, expressing historical language, and establishing cause-effect relationships. In this context, the main purpose of the research was to determine on which subjects social studies teachers use miniatures. Phenomenology, one of the qualitative research methods, was used in the study. The study group of the research consists of a total of 10 social studies teachers, 7 male and 3 female, working in secondary schools in the central district of Afyon province in the fall semester of the 2022-2023 academic year. In the research, the data were collected with a semi-structured interview form, one of the qualitative research methods. The semi-structured interview form used in the research was composed of 4 open-ended questions. The data obtained in the research were analyzed by content analysis method. When evaluating the research findings, it was concluded that miniatures could be generally used to address topics related to the Ottoman Empire and Civilizations. Within the scope of the research, it was concluded that the use of miniatures in the social studies course has positive effects on historical literacy. As a result of the study, suggestions can be made to establish activities that support the use of miniatures in textbooks and MEB teacher portals.

Keywords: Social studies course, historical literacy, use of miniatures

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Introduction

Social studies education has played an important role in the educational policies of societies from the past to the present. Through social studies teaching, which aims to transmit the culture and information from the past, governments primarily want to educate citizens who will preserve and protect their culture and be connected to their country. In addition to this goal, another important task that burdens social studies education has emerged in the curriculum in recent years, and this curriculum has been restructured toward this goal. In accordance with this goal, social studies instruction aims to teach children certain thinking skills, especially historical thinking.

Looking at the conditions brought by the information and technology age from a different point of view, we live in a world where information is easily accessible. In this context, it is becoming increasingly important in modern educational institutions to educate children who have thinking skills and can use information effectively, rather than imparting information directly. This perspective is also one of the basic principles of constructivism. In this sense, some teaching methods, strategies and techniques are developed in terms of constructivisim (Körükcü, 2021; Açıkalın, 2017). According to Duran (2011:178), social studies exhibit a structure intertwined with other disciplines. It is a comprehensive educational program that aims to pass on knowledge and skills to future generations through a predetermined framework. This program emphasizes the importance of exploring various research areas and integrating them into a unified theme, while simplifying the content selected from diverse social and humanities disciplines to make it accessible to students.

Evidence based learning, which is used effectively in teaching social studies and a constructivist method, allows the child to make inferences about the incident by questioning evidence sources in his / her possession like a historian. The student displays higher level thinking skills effectively during this process. In addition, there are great deals of document, object or work suitable for use in social studies class. However, the observations and researches which have been done shows that the evidences are not used in effective way in social studies education, in fact due to situations such as the fact that social studies courses consists of abstract concepts and the selection of memorization-based methods, it is found the lessons incomprehensible and boring and develops a negative attitude towards the lesson. (Yildiz, 2003)

The word miniature is derived from the terms minium and miniare. This term, which was used to decorate and highlight letters at the beginning of a chapter, was influenced by the words "minor" or "minus," which mean small over time, and started to be used for small pictures that adorn manuscript books. In miniature art, it has been observed that the artists incorporate the customs of the society they were raised in, as well as the clothing styles and historical events of the people from that time period, into their work up to the present day (Elmas, 1998). Considering these existing problems and proposed solutions, it is believed that miniatures can be utilized as historical evidence. This approach serves two purposes: providing students with a scientific perspective and effectively representing the subjects, making them suitable for social studies education. It is necessary to briefly mention what "miniature" means. It is the name given to small-sized paintings and the art of painting finely embodied on small-sized objects such as manuscript books and medallions. In Medieval Europe, the first letters at the beginning of a chapter in manuscript books were decorated by painting them red. Lead oxide, known as minium in Latin, was used to achieve this red color for the ornamentation.

Scheiber (1978) first introduced the concept of historical literacy. Scheiber drew attention to the content and method points in history education. According to Scheiber, historical evidence and materials should be brought into the classroom. The student must learn history using concrete resources(Ata, Keçe: 2014). Historical literacy encompasses the concepts of history and literacy. It refers to the study, interpretation, and evaluation of historical events. It goes against the principles of history education to rely solely on memorization. History teaching programs should be prepared according to historical literacy skills. According to Taylor and Young, these skills are as follows:

- Information on historical events
- Chronological Thinking Skill
- Ability to establish a cause-and-effect relationship
- Ability to understand historical languages
- Historical Research Skills
- Ability to use information and communication technologies
- Ability to have historical empathy
- The ability to express historical events in narrative form
- Ability to associate the past with the present

- Ability to distinguish conflicting comments
- Expressive expression skills
- Moral Reasoning Skills

Various visual images are used in the teaching of history in the social studies course. One of them is miniature. However, miniatures alone do not make sense. Its functions, meanings, periods, and authors need to be understood (Acun, 2004). This understanding also applies to historical literacy. Because a student studying miniatures must possess skills such as historical empathy, chronological thinking, understanding historical language, interpretation, expression, and establishing cause-and-effect relationships.

The main purpose of the study in question is to investigate the Use of miniatures in Social Studies courses in terms of Historical Literacy. Within the scope of this main objective, answers to the following sub-problems were sought:

1. In which subjects do social studies teachers use miniatures?
2. What methods and techniques do social studies teachers use in their instruction when utilizing miniatures?
3. According to teachers, what are the advantages and disadvantages of using miniatures in social studies lessons?
4. According to social studies teachers, what skills does the use of miniatures in classes support?
5. According to social studies teachers, how does the use of miniatures in lessons affect historical literacy?

Method

A phenomenological pattern was used, which is one of the qualitative research methods. The factology pattern aims to identify facts that we are aware of but do not have detailed information about. In this study, the aim is to uncover the individual perceptions of the participants regarding a phenomenon (Yildirim & Simsek, 2015).

Model

The research study group consists of 7 men and 3 women who work as social studies teachers in secondary schools in the central district of Afyon province during the fall semester of the 2022-2023 academic year. The total number of participants is 10. An easily accessible sampling technique was used to select teachers. The easily accessible sampling method accelerates research and provides convenience in practice. With this method, the researcher takes samples from the environment he/she knows (Yildirim & Simsek, 2015). The information for the study group is displayed in Table 1.

Table 1

Personal information of participants

Participant	Gender	Professional Seniority
1	Male	17
2	Female	3
3	Female	22
4	Female	5
5	Male	12
6	Male	2
7	Male	10
8	Male	22
9	Male	3
10	Male	20

Data Collection Tools

In this study, data were collected through a semi-structured interview, which is part of the qualitative research method. In preparing the interview form, preliminary interviews were conducted with three social studies teachers who were not part of the sample and the area related to the topic is studied. Based on the obtained data, the interview form was prepared and discussed with two teachers from the field of social studies teaching and finalized taking into account their opinions and suggestions. The semi-structured interview sheet used in the research consists of 6 open-ended questions. The questionnaire is divided into two sections. The first section contains questions about the place of service, gender, and professional seniority. The second section contains the interview questions. The interviews were conducted online or in person, depending on where the informant lives. Each interview lasted 30 minutes.

Collection of Data and Analysis

The data obtained in the research was analyzed using the content analysis method. Content analysis aims to present these concepts to the reader by organizing the data into themes that will specify them. It is a systematic and repeatable technique (Yildirim and Simsek, 2015).

Compliance with Ethical Standart

The meeting numbered 2023/11-07 of Niğde Ömer Halisdemir University Ethics Committee dated 12.09.2023 and numbered 11 decision.

Findings

1. Findings o The First Sub-problem of The Research

The main purpose of the research is to investigate "the use of miniatures in social studies courses in relation to historical literacy." In this regard, the first sub-problem of the study is "Which subjects do social studies teachers utilize miniatures for?" The answers to this question are shown in Table 2 below.

Table 2

Topics that Social Studies Teachers Explain Using Miniatures

Participants	Answers
1	It can be used in many subjects, from Ottoman to teaching values.
2	I think it can be used in the subject Civilizations in 5th grade and Ottoman Empire in 7th grade.
3	I usually use miniatures in my slides about battle scenes in the Ottoman period.
4	I think it can be used in any social studies class subject.
5	I am satisfied that it can be used in many subjects such as occupations, Mesopotamian civilizations, Ottoman and Seljuk periods
6	I used it once about the conquest of Istanbul (Constantinople) in 7th grade, but other than that I think I can use it in other subjects.
7	I think it is effective to interpret especially historical places, war and social life.
8	Some events in the history of the Ottoman Empire were told with miniatures. Especially the use of miniatures of historical places is helpful.
9	I think it can be used about the empires and civilizations that were founded in the past, and the Ottoman Empire.
10	In my opinion, it can be used for teaching about the Uighurs and the Ottoman Empire.

"For which topic is the use of miniatures appropriate in social studies classes?", the participants are asked and they think that the use of miniatures is appropriate for the topics about the Ottoman Empire. Teachers present different perspectives in their lessons from 5th grade to 7th grade. In addition to the increase in curiosity among the students, they mentioned that they shared the materials they had with 8th-grade students during Museum Week. The images used by our teacher are shared in the attachments section. (Attachment 1).

2. Findings on the Second Sub-problem

The second sub-problem of the research is "What methods and techniques do social studies teachers use in their instruction?" The question was directed to the teachers. The data for the first subproblem is given in Table 3.

Table 3

Methods and Techniques Used in the Use of Miniature

Participants	Answers
1	I prefer an activity with demonstration.
2	I prefer an activity with demonstration.
3	I prefer an activity with demonstration.
4	It can be demonstrated by reflecting to the board.
5	I prefer an activity with demonstration.
6	I prefer an activity with demonstration and questions for the students.
7	I prefer to use appropriate imagery that establishes coherence between the relevant topic and the learning outcome.
8	I prefer an activity with demonstration.
9	I prefer my students to paint miniatures.
10	I prefer my students to paint pictures.

"Which activity do you prefer when using miniatures?" the participants are asked in the survey. The analysis of the given answers shows that 8 participants, the majority, teach by demonstration and 2 participants prefer that students paint pictures.

3. The Third Sub-problem

The third subproblem of the research is the advantages and disadvantages of using miniatures in social studies lessons for teachers. The data for the third sub-problem is given in Table 4 and Table 5.

Table 4

The Advantages of Using Miniatures in the Social Studies Lessons

Participants	Answers
1	The students do not forget what they have learned visually.
2	It can be used as illustrative material. I think it is beneficial in that it allows students to make inferences and students learn about a traditional art.
3	Students can analyse visuals and express this. Students like to see pictures. It attracts attention. Children can interpret what they have seen.
4	I think that it attracts the attention of students and permanent learning takes place.
5	I think it is beneficial that improve the permanence of the subjects and understanding
6	During class, it quickly attracts students' attention and they willingly participate in class. It

	ensures permanent learning.
7	Since it is a visual material, it increases memorability.
8	Students' views of events during the Ottoman Empire can be changed by viewing a miniature.
9	I think it provides convenience and permanence by improving the visuality of understanding depending on the subject.
10	I think it will provide an advantage in terms of giving information about the period taught.

Responses to the question "What are the advantages of using miniatures in the social studies classroom?" were analysed. One of the teachers who participated in the survey believes that the use of miniatures provides an advantage in terms of giving information, while the others believe that learning with visuals promotes permanent learning.

Table 5

The Disadvantages of Using Miniatures in the Social Studies Lessons

Participants	Answers
1	It may take some time to find an appropriate miniature and use it in the context of the topic, or students may have difficulty understanding the visual.
2	It may take some time to find an appropriate miniature and use it in the context of the topic, or students may have difficulty understanding the visual. Also, we have limited time to complete the topics.
3	It is hard to find what is appropriate for the level of the students. Instead, I prefer to use photographs because they are easily accessible
4	I think it is a disadvantage that it is time consuming because it requires prior preparation.
5	I do not know how and where to get the miniatures. Also, I think it is time consuming to select and decide.
6	It is so hard to use miniatures while teaching. I should know well the conditions of time as a teacher. I had to spend more time while practicing. I spent a lot of time. It was not easy to find a suitable miniature for the topic and ask the students the right questions. That's the reason why I never do this.
7	When instructional time is insufficient, it results in wasted time in learning outcomes.
8	Since the miniature is different from the real images, it may not reflect what is desired.
9	I think it is difficult to understand because of the small drawings.
10	---

"What are the disadvantages of using miniatures in the social studies classroom?" participants are asked as part of the survey. Analysing the answers, one participant thinks that it is a disadvantage because the drawings are too small, and another participant thinks the same, because the miniature is different from the real pictures, it may not be understood. Other research participants think it is a waste of time.

4. The Fourth Sub-problem

The fourth sub-problem of the research is how social studies teachers perceive the skills that the use of miniatures in lessons can enhance. The data for the fourth sub-problem is given in Table 6.

Table 6

Skills to Improve the Use of Miniatures in Social Studies Class

Participants	Answer
1	I think it will enhance the children's visual memory.
2	I think this will enhance metacognitive skills as children infer what they see.
3	I think that children's visual memory, inferences from what they see, and comments on it will progress.
4	I think it will improve the ability to look at an event from multiple angles, and provide a permanent learning process.
5	It will help children's visual memory. At least it will make them think that there is such an art.
6	You start the class with excitement and you do not have to make a special effort to draw attention. I think it makes for permanent learning as a visual.
7	It can create the ability to make miniature pictures in students. They can try to learn and look at a picture from different angles.
8	I think that students' hand skills will improve as a result of drawing, and that the subject matter will become more comprehensible if it takes a place in visual memory.
9	I think since the visual content is more dominant, it can affect the children's perception, and it will provide to feel empathy with history by traveling through that time.
10	I think it will develope children's visual memory.

"What skills do you think are most enhanced by the use of miniatures in the social studies classroom?" participants asked. In evaluating their responses, they generally expressed the opinion that children will improve their visual memory. One of the participants stated that it would help students develop the ability to create miniatures and try to learn and look at a picture from different angles. Another participant stated that the students would develop the ability to look at an event from different angles.

5. The Fifth Sub-problem

The fifth sub-problem of the research is how the use of miniatures in lessons affects historical literacy, as perceived by social studies teachers. The data for the fifth sub-problem is given in Table 7.

Tablo 7

Use of Miniature and Historical Literacy

Participants	Answer
1	It enhances the historical literacy.
2	It increases historical literacy and historical thinking.
3	It increases interest in historical literacy, and the information becomes more tangible.
4	It enhances the historical literacy.
5	It increases historical literacy and curiosity about history.
6	It positively affects historical literacy.
7	It makes you like historical literacy.
8	It directs historical literacy.
9	It draws attention to the historical literacy.
10	It makes you like historical literacy and makes history more tangible.

Discussion and Results

When evaluating the research findings, it is stated that miniatures can be generally used to address issues related to the Ottoman Empire and Civilizations. Eight of the teachers participating in the study preferred an activity with a demonstration, and two participants preferred painting pictures. Another finding of the study is that the use of miniatures improves children's visual memory and ensures permanent learning (Table 7). Related research on this topic can be found below.

Lynn (1993), the author of the study about Turkish miniatures, planned an activity using Turkish miniatures to improve the student’s reading and research skills and encourage them to think in a primary school in the U.S. The cat miniature, which was drawn on a manuscript written in the 15th century during the Ottoman Empire period, grabbed students’ attention. The teacher asked the students why this cat might have been pictured on such an important document. Students have effectively used their reading, writing, and interpreting skills by exhibiting high-level thinking skills, especially creative and critical thinking skills. According to the students’ exam points given by the researcher, it can be concluded that the students improve their thoughts about Turkiye and Turkish culture, make creative inferences based on paintings, and are active and motivated during this period. The same effects are expected to be observed in students during this research process.

In the research carried out by Akahmet in 2015, the participation of students studying at the secondary school level carried out a study in order to examine the contribution and importance of miniatures to the art history course. Starting from the miniatures that passed in Surname, the aim was to reach the goals with some questions that would allow children to interpret, solve, define, and reach proof of these works. As a result of the study, miniatures contribute to esthetic education and it provides the transfer of cult heritage in the students. In the same study, it was concluded that miniatures can be used effectively in social studies and training due to their learning outcomes such as making inferences, visual literacy, aesthetics, perception awareness, sustaining traditional arts, and the transfer of traditional arts as a result of the examination of objects through miniatures. (Akmehmet, 2015).

A study was carried out by Akinci and Dilek in order to examine the effect of representative paintings used in the 7th-grade Social Studies course on children's historical thinking skills in 2012. When the research results are evaluated, students' reasoning skills, chronological thinking skills, historical questioning skills, and interpretation and analysis skills have been dramatically improved as a result of four-week course activities using representative pictures.

In research carried out by Akbaba in 2005, the effect of painting usage on the social studies class achievements of children studying in the 8th grade was examined. When the research results are evaluated, it has been concluded that the use of art positively affects children's academic achievements and proves that students are more motivated to attend social studies lessons and that they have high-level mental performance in matters such as empathy, critical thinking, creative thinking, chronology knowledge, and problem-solving.

Within the scope of the research, it was concluded that the use of miniatures in the social studies course has a positive effect on historical literacy. Thanks to miniatures, history topics in social studies lessons become more tangible. Students' awareness of history, past events, chronology, and historical literacy increases.

It is believed that in order to effectively and efficiently use miniatures in social studies lessons, teachers should first recognize the importance of using miniatures in relation to the lesson's objectives and be knowledgeable about their benefits. In addition, the study revealed that even if the teachers involved in the research desired to incorporate such materials into their lessons, the preparation process for the lesson could be lengthy and exhausting for them. For this reason, next time they may prefer to choose materials that are easy and simple to prepare.

Recommendations

As a result of this study, the following suggestions can be made:

- In this study, 10 social studies were discussed regarding the use of miniature teachers. More social studies teachers can gather opinions on the subject.
- The study is based on gathering opinions from teachers on the use of miniatures. Experimental studies can be conducted with secondary school students on the use of miniatures.
- In the study, it is seen that teachers support the use of miniatures. Activities that support the use of miniatures in textbooks or MEB teacher portals can be established.

Compliance with Ethical Standart

The meeting numbered 2023/11-07 of Niğde Ömer Halisdemir University Ethics Committee dated 12.09.2023 and numbered 11 decision.

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Attachment 1

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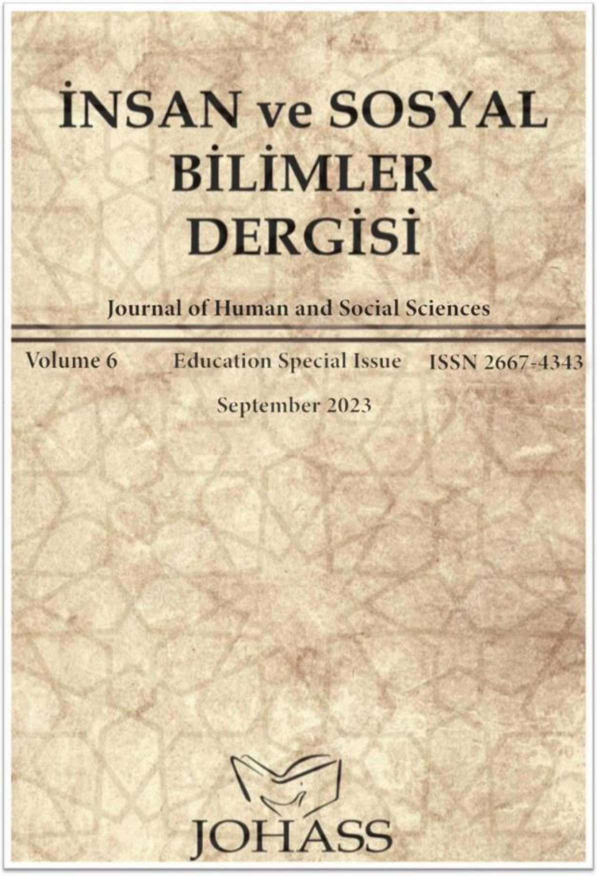

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Creative Explorations for a Sustainable Future: Philosophy-Based Creative Drama Workshop Proposal for Children

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Creative Explorations for a Sustainable Future: Philosophy-Based Creative Drama Workshop Proposal for Children

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Abstract **Review Article**

"The Sustainable Development Goals (SDGs)", are a universal call for action, covering targets to be fulfilled by the end of 2030. Many global problems such as global climate change and drought, environmental pollution, depletion of natural resources and biodiversity, inclusive education have evolved into the greatest collective problem of all humanity. It is recognized that teachers, are also responsible for ensuring a sustainable life for future generations and contributing to its sustainability. At this point, there is a need for educational approaches based on group dynamics that will contribute to the socialization of the individual, support them to gain new experiences, provide them with the opportunity to produce solutions to the encountered obstacles, be sensitive to human values, have a questioning perspective, support them in processes that will enable critical, collaborative, attentive and creative thinking skills, and guide them in processes that will enable them to activate their critical, collaborative, attentive and creative thinking skills. Philosophy and creative drama practices for children based on these educational approaches are among two of the methods that are thought to be effective in addressing and questioning development goals and developing solutions for individuals who are learning about the actions that can be carried out. The research, which is designed to convey this universal call for action to children through the teachers of the future and to support them to be an active part of this process, is based on three components: sustainable development goals, creative drama and philosophy for children, and a sample workshop plan is presented.

Keywords: Sustainability, creative drama, philosophy for children, basic education

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Introduction

The education sector has an essential and broad scope of mandates, covering many challenging issues in the field of education in a rapidly evolving and diverse world. Education has a key role to fulfill in local and global climate change mitigation and adaptation efforts. In the world we live in, wars, rising industrialization, unconscious consumption of natural resources and destruction of the natural environment, increase in fossil fuel consumption are major challenges that rapidly threaten human life. It would not be incorrect to state that human beings have an enormous share in this destruction of the natural environment (Yeşiltaş, 2010). Russell and Russell (1979, p. 60, 61) stated with great foresight that "Unless precautions are adopted, it will become inevitable that industrialization will lead to abundance for today's generations, poverty for the next and hunger for the third...", which is the current expression of the world order we are currently facing (Yapıcı, 2003). The sustainability of economic growth, which will be achieved in a real and correct sense through the balanced consumption of the earth's resources, is only possible if human beings, who manage to live in interaction with nature, have the necessary education (Arslan, 1997).

As a result of this change in perception about environmental problems, the necessity of organizing educational activities for the values, attitudes and behaviors of individuals about the environment has emerged (Özer, 2015). In this regard, teachers, "who are primarily considered as models, have an effective role in spreading ecological awareness, gaining ethical approaches to environmental problems and transforming sustainable life principles into the behaviors of students" (Alpak Tunç, 2015, p. 17). Only teachers who have sufficient environmental sensitivity and awareness will enable their students to gain an effective environmental education (Özcan, 2010) and assume a guiding role in achieving a sustainable life.

Therefore, this study is based on three components, namely "sustainable development goals, creative drama, and philosophy for children and societies" in order to convey the universal call for action to protect the world we live in, to transform it into a habitable world and to ensure that all people live in peace and tranquility, to children through the teachers of the future and to support them to be an active part of this process.

In the "Eleventh Development Plan" approved by the Grand National Assembly of Turkey (Presidency of the Republic of Turkey Presidency of Strategy and Budget, 2019), some important articles are discussed under the title of "Evolution of Educational

Approaches". In the thirty-third article of these articles, it is stated that "The education systems which equip students with analytical, critical, creative and computational thinking skills for the solution of real-life problems through an approach that focuses on natural sciences...", and other disciplines in an integrated manner, are gaining greater importance (p.7). Therefore, within the scope of this study, the "climate crisis" problem, which exists in real life, is addressed through the integrated work of two different disciplinary fields such as creative drama and philosophy for children and communities. Among the achievements of the philosophy for children and communities programme; raising individuals with critical, creative, collaborative, caring, and analytical thinking skills is taken as a basis. In the same way, creative drama studies aim to enable individuals to think creatively and critically. In the thirty-fourth article of the eleventh development plan, it is stated that "Learning environments and techniques involving mutual teaching and learning in groups and imposing skills of capturing knowledge from different sources outside school and comparing them, adopting edutainment approaches, and promoting self-confidence in decision making are getting more popular" (p.7). Therefore, both creative drama and philosophy for children and communities practices gain importance at this point. Both techniques are techniques that can be applied in both in-school and out-of-school learning environments, contribute to individuals' learning while having fun, support the development of self-confidence, aim to develop a solution to a problem, and are suitable for interdisciplinary studies.

Although it was emphasised both in the “Eleventh Development Plan” and in the "Workshop on Integration Climate Change Awareness into Basic Education", the insufficiency of studies designed and proposed in the literature on the integration of sustainability into the education process has led to the need to fill the gap in this field. Based on this information and requirements, it would be appropriate to express the purpose of the study as "to guide teachers, who are a stakeholder of the education and training process in raising individuals who prioritize sustainability and are sensitive to the environment and climate change, and to present a study proposal that they can carry out with their students". Depending on this purpose, the research, which is a systematic review, has first addressed the title education for sustainable development. Then, theoretical information about creative drama and philosophy for children practices used in learning environments to support the adoption of sustainable development goals by students and transform them into applicable life experiences was presented and the benefits of these practices were discussed. Finally, in line with the 13th sustainable development goal "Climate Action", a 180-minute workshop proposal was presented, which was designed in accordance with the philosophy-based creative drama method for children and piloted (45 minutes) with volunteer students.

Education for Sustainable Development

Sustainable development is currently defined as an interdisciplinary field that encompasses environmental, economic and social criteria (Schmandt & Ward, 2000) and aims to provide a solution to a problem in terms of the emergence and development (Bartelmus, 1994; WCED, 1987).

"The Sustainable Development Goals (SDGs)", also referred to as the "Global Goals", are a universal call to action by the member states of the United Nations, covering goals to be fulfilled by the end of 2030. By 2030, there are three important goals. To achieve this, 17 global goals have been agreed upon. This call, which took effect in January 2016, focuses on solving social, cultural and ecological issues around the world, including ending hunger and poverty, combating climate change, ensuring gender equality, promoting quality education, responsible production and consumption, and establishing peace, justice and powerful institutions (UNDP Türkiye, 2023).

The UN World Commission on Environment and Development (WCED), established in 1983, published a report entitled "Our Common Future" in 1987 with participants from twenty different countries. In this report, the Commission concluded its efforts and called on the public, non-governmental organizations, educational institutions, and the scientific community, stating that they are the key actors in initiating the process of sustainable development in the world and that they believe that they will be successful in this process with a joint effort, and addressed all teachers in the world with the statement "In particular, the Commission is addressing the young. The world's teachers will have a crucial role to play in bringing this report to them" (WCED, 1987, s. 8).

This report, referred to as the "Brundtland Report" after Gro Harlem Brundtland, the chairperson of the Commission, not only has guiding principles for sustainable development today, but is also of great importance in terms of placing the concept of sustainability on the world agenda. The expression for sustainable development in this report is defined as "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p.41). "The report, which elaborates the idea of sustainable development in detail, displays an approach that reconciles the developmentalist ideology of the 1960s with the environmentalist ideology of the 1970s. In the face of increasingly severe environmental problems, the report recognizes the establishment of a vital bridge between environmental development and economic development and the "sustainable" development as the way out for humanity." (as cited in Bozlağan, 2005, s. 1019).

However, since rapidly developing technology and many innovations have facilitated human life in every field, the most important underlying issue has often been ignored aside from the experts working in the field. Rapid population growth, internal migration, urbanization and industrialization have led to various problems, and the fact that developing science and technology facilitates daily life has been considered as a gain, and it has been ignored that this situation threatens life in social, cultural, economic and environmental terms. Many global problems such as global climate change and drought, environmental pollution, depletion of natural resources and biodiversity, shortage of energy resources, hunger and poverty have been on the world's agenda and have become the greatest collective problem of all humanity.

Mızıkacı (2020, pp. 9, 10) stated that settlement forms have been reshaped with the industrial revolution and mentioned the negative effects of this situation on production systems and the natural structure of agriculture and water resources. At the same time, he draws attention to the fact that rapidly developing and growing cities overflowing into agricultural lands, the transformation of the local and productive population living in rural areas into the consumer class, and the rapid population growth will be among the water-poor regions with disasters such as hunger, thirst, pollution, epidemics, which are not hard to foresee for our country. Baykal and Baykal (2008) stated that human beings are always in an effort to desire and demand the best, and that this situation has taken place in the form of "development" in economic language, but that these endless demands and desires cause the limitation, decrease and pollution of natural resources. The statement "The efforts to achieve social welfare have mortgaged the future of humanity" clearly summarizes the situation we are currently facing.

The concept of "sustainable development", which has been on the world agenda since the 1980s, has imposed certain responsibilities not only on states but also on local governments, national and international non-governmental organizations (Uzel, 2006, pp. 77, 78). The main goal adopted at this point has been multi-actorism and social consensus (Akgül, 2010). Bauen, Baker and Johnson (1996) propose six principles to ensure sustainability in society. These principles are listed as follows: "Nurturing a sense of belonging to a place, supporting social vitality, building local capacity to support flexibility and adaptation in the face of change, supporting a sense of responsibility as a leader, supporting and reinforcing the importance of relationships and connections at local and supra-local levels, and increasing equality within the social structure of the place" (as cited in Akgül, 2010, p. 144). Considering these six principles, not only the efforts of the government, local administrations, non-governmental organizations and individual efforts are not sufficient to restore this disrupted balance, but both the business life and the education sector should also take their place in the list of actions to be undertaken. It is believed that interdisciplinary and collaborative studies will contribute to the rebalancing of nature. For this reason, it should not be overlooked that teachers, who are the practitioners of the education and training process, also have duties in order to provide a sustainable life for future generations and to contribute to making it sustainable.

The issue of the deterioration of the natural balance of the world, which has become the primary common issue on the world agenda and which environmental scientists stress and shape their studies in this direction, is discussed both nationally and internationally. Countries have identified the concept of climate change, which they have addressed in various reports on the subject, as the most important environmental issue faced by individuals, communities and countries. Education plays a key role in local and global climate change mitigation and adaptation efforts. However, a final program that will reflect the philosophy of sustainable development in a comprehensive way in the education systems of nations unfortunately does not exist today (Yapıcı, 2003). UNESCO, under Education for Sustainable Development (ESD), supports member states in building the capacity of policy makers and educators to improve the education sector's response to climate change (Tang, 2013).

According to UNESCO data, one in two countries mentions the climate crisis in their national education curricula. Climate change education addresses the challenges of climate change and sustainable development facing both developed and developing countries. It not only helps students comprehend the underlying causes and consequences of climate change, but also promotes the acquisition of the skills and dispositions required by individuals and societies in their resilience to the climate crisis. Additionally, it improves the educational system's readiness for climate change as well as its capacity to both mitigate and adapt to it (Gibb, 2016).

On February 25, 2022, the 213th recommendation of the Commission of the Ministry of Environment, Urbanization and Climate of the Republic of Turkey under the title of

"Education and Awareness"; it was decided to review the acquisitions in the curriculum starting from pre-school period in terms of sustainable development goals, to update the curriculum, to prepare activities on climate change for the relevant acquisitions, to provide in-service trainings to teachers on the subject, and to disseminate practical studies to raise awareness on climate change in non-formal education (Republic of Türkiye Ministry of Environment, Urbanization and Climate Change, 2022, p. 23). Following the commission decision, the Ministry of National Education prepared a Climate Change Action Plan on September 29, 2022 and shared it with stakeholders. According to this action plan, it was announced that curricula would be updated to be compatible with environmental and climate change issues, climate workshops would be established in schools and National Education Nature Parks would be established in the surrounding area, and innovative practices such as air quality measurement devices and gray water storage in classrooms would be implemented. In October 2022, the Ministry of National Education (MoNE) prepared a Climate Change Action Plan consisting of 6 objectives to "increase sensitivity and awareness on environment and climate change" and "strengthen the physical capacity of learning environments against climate change" (MoNE, 2022a). In order to raise awareness on climate change, trainings were provided to teachers on the Teacher Information Network (TIC) and to students on the Education Information Network (EIN) as well as in schools. In addition, the "Environmental Education and Climate Change Course" Curriculum, which will be implemented as 2 hours per week in 6th, 7th or 8th grades of secondary schools starting from the 2022-2023 academic year, has been prepared (MoNE, 2022b).

Following the preparation of the Climate Change Action Plan, a workshop entitled "Workshop on Integration Climate Change Awareness into Basic Education" was held on 22-23 November 2022 with the support of the Ministry of National Education General Directorate of Basic Education with the support of the European Union TAIEX. According to the workshop report (MoNE, 2023a), within the framework of the adaptation and mitigation policies to be pursued by our country in the fight against climate change, attention was drawn to updating educational programs that will strengthen our connection with nature and promote green and digital skills in line with the "Zero Waste", "2053 Net Zero Emission" and "Green Development Move" targets. Looking at the extent to which the decisions taken on this issue have been implemented, it can be seen that a meeting on the environment and climate change was held on 18 August 2023 under the coordination of the General Directorate of Support Services of the Ministry of National Education. A meeting was held to prepare an

"Environment and Climate Change Glossary" in order to make the terminology related to the environment and climate change understandable in all genres according to age and development level, and it was informed that the work is ongoing and it was stated that solution-oriented studies on climate change will continue (MoNe, 2023b). At the same time, with the decision of the Board of Education of the Ministry of National Education dated 24 August 2023 and numbered 43, the weekly course schedule of primary education institutions was updated and started to be implemented in all grades from the school year 2023-2024. The elective section of the updated schedule was divided into three groups: "Man, Society and Science", "Religion, Morals and Values" and "Culture, Arts and Sports". Among these groups, the "Environmental Education and Climate Change Course", which was planned to be implemented among the elective courses under the title "Man, Society and Science", was put into practice and started to be implemented in 6th, 7th, and 8th grades as two hours per week (MoNE, 2023c). At the same time, within the framework of Turkey's Green Consensus Plan and Green Development Initiative, 1000 Environmentally Friendly Schools, Zero Waste, Ecological Schools, Energy Efficiency in Public Buildings are among the activities carried out in this process (MoNE, 2023a).

Utilizing Creative Drama and Philosophy for Children towards Sustainability

Undoubtedly, in the education and training process, there is a need for educational approaches based on group dynamics that will contribute to the socialization of the individual, support them to gain new experiences and knowledge, provide them with the opportunity to produce solutions to the encountered obstacles, be sensitive to life and human values, have a questioning perspective, support them in processes that will enable critical, collaborative, attentive and creative thinking skills, and guide them in processes that will enable them to activate their critical, collaborative, attentive and creative thinking skills (Şahin, 2022). Creative drama and philosophy for children practices are two of the methods that are thought to be effective in addressing and questioning the development goal titled "Climate Action", which is among the sustainable development goals and the subject of this study, and in developing solutions for actions that can be implemented.

Creative drama, which is defined as an efficient way of learning, is "the portrayal of a goal or idea based on the life experiences of the members of a group through techniques such as improvisation, role playing, etc." (Adıgüzel, 2020, p. 45). Drama practices enable the individual to be a participant instead of being passive and to be independent instead of being dependent (San, 1996). It is a valuable tool that attracts children's interest in the study of a subject and an effective method for teaching any topic. Although it is a formal or informal group art, it is reshaped with the contribution of each participant. A well-planned creative drama session provides practice for critical thinking as well as creativity. In the process of using drama as a teaching method, the teacher employs these techniques to achieve predetermined outcomes such as conveying information, arousing interest, solving problems, shifting attitudes, etc (McCaslin, 2019, s. 261).

One of the most important reasons why creative drama is preferred as a method is that the participants use role-playing and improvisation techniques, play an active role in the process, experience the moment of conflict by playing a role in the fictional order, develop solutions with a critical perspective and contribute to the process, especially in sensing, internalizing and experiencing universal problems such as sustainability. Addressing sustainability issues through drama can assist students to understand these issues in a more realistic and internalized way. For example, students can write scenarios in which they play different characters, such as an environmental protection activist, an energy company manager or a farmer. This will enable students to experience the complex interactions and contradictions of sustainability as they try to understand different perspectives.

Another example lies in the forum theater approach. Forum theatre, a type of theatre, can also be used as a technique in creative drama studies. In forum theater, an interactive type of theater in which the audience can intervene in events, there is a group of people who present a short scene that realistically depicts a social problem important to them and reflects their real life experiences. When these scene(s) are performed repeatedly, the audience, called the "audience", actively participates in the scene within the framework of predetermined rules at the invitation of the "joker" (intermediary). The scene is thus reshaped towards a better outcome for the social. The aim is to support each other in solving the social problem, to demonstrate whether changing words and actions affect the outcome, to influence people personally, socially and emotionally, and to support better outcomes for the greater good (Baldwin, 2019, p.141). For example, a scene addressing the issue of sustainability can be presented to students, giving them the opportunity to change the characters in the scene, their discourse or actions, or to experience different options. Then, it can be discussed whether this change is shaped towards social common good or not.

In this process, it is believed that the philosophy for children and communities (P4C) sessions, in which creative drama is implemented as a method, contribute positively to the participants in terms of developing experiences, gaining universal sensitivity, and developing critical, creative, collaborative and caring thinking skills. The philosophy for children (P4C) education program based on Socratic discussion is a field that interacts with different disciplines. This abbreviation, which is referred to as P4C in the literature, has three different expansions. The first one is Philosophy for Children, the second one is Philosophy for Communities, and the third one emphasizes critical, creative, collaborative and caring thinking and community skills (Özdemir, 2021).

The pioneer of this method, American philosopher Matthew Lipman, realized that his students were not effectively utilizing their thinking skills during the philosophy courses he taught at Colombia University. After this realization, he decided to develop the philosophy for children program as a thinking education program. Lipman and his colleagues took the first step of this valuable journey with the education program they prepared at the Institute for the Development of Philosophy for Children at Montclair University.

It is feasible to benefit from the creative drama method in the process of practicing the philosophy method for children. Because both methods have similar processes with each other. Akkocaoğlu Çayır (2021, pp. 101,102) developed a similarity table based on the general characteristics of creative drama stated by Adıgüzel (2020). To summarize this table briefly;

1. Both methods are group activities. Drama activities are carried out with voluntary and active participation of group members. Philosophy for communities is also a group activity. The participants are members of the community of inquiry and voluntary participation in the process is essential.
2. Both methods are shaped by participant experiences. Drama studies are based on participant experiences and are participant-centered. In philosophy for communities, the philosophical problem is presented in relation to the life experiences of community members. The discussion process diversifies and progresses with examples from life experiences.
3. Both methods are process-oriented, not result-oriented. The desire to co-produce and share is at the forefront of drama work. The philosophy for communities, on the other hand, is not to find the answer to the question being discussed, but to have new questions and ideas at the end of the process.
4. Both methods have the presence of a facilitator/teacher with knowledge and experience in the field.

5. Both methods support anyone who volunteers to be a member of the group.
6. Both methods are the common ground of different disciplines. Drama studies is an interdisciplinary field. Philosophy for communities is located at the intersection of philosophy and educational sciences.
7. Both methods have similar characteristics to games. Drama studies utilize the characteristics of games such as freedom within rules, pretend play, competition-conflict-dramatic moments and fun. In philosophy for communities, games can be used to stimulate discussion, warm up, build trust, and make introductions.

Şahin (2022, p. 6) states that the enrichment of philosophy for communities practices with creative drama concretizes the way the concept in question and the topic under discussion are handled. There are common points in both educational programs, and the essence is that participants express their views and opinions freely. In philosophy sessions with children, creative drama helps to share ideas freely. The dramatization of the philosophical problem at hand both concretizes the concept or phenomenon in the background and supports active participation. Baldwin (2020, p. 6) states that the process of developing philosophy for children can be associated with drama and that drama activities begin with a story focus. Philosophical thinking is encouraged and developed through the storyline. In doing so, picture boks that deal with the main questions and issues necessary for philosophical thinking are utilized. In this regard, high-quality picture books are also employed as effective stimuli in the process of inquiry with children, young people and adults.

Philosophy for Children (P4C) Implementation Proposal with Creative Drama as a Method

During the workshop proposal preparation process, a literature review was conducted and a draft workshop design was prepared by reviewing the researcher's drama leadership graduation project (Şahin, 2022). Stimuli that can be utilized for socratic discussion, that are suitable for the age and level of the students, and that are also related to the sustainable development purpose determined within the scope of the research topic were investigated. The story "The Rain Tree" in the book "Tales from Mother Earth", which was believed to be suitable for the workshop draft, was chosen as the stimulus. Then, the questions planned to be discussed during the investigation process were prepared and organized by integrating them with appropriate activities in the draft plan. The 13th sustainable development goal, "Climate Action", and the goals aimed to be achieved by students were determined and the workshop plan was brought together with volunteer students in a single 45-minute session at the TÜBİTAK (Scientific and Technological Research Council of Turkey) 4004 Science Festival activities with the title "Does Nature Resent Us?". The workshop proposal presented here is an improved and enriched version of the first workshop.

According to San (1991), creative drama in Turkey is realized in five stages. These stages include warm-up and relaxation activities, games, improvisation, formation, and evaluation. Based on San's stages, Adıgüzel (2006) summarized creative drama plans into three stages: a) warmup/preparation, b) improvisation, and c) evaluation/discussion. The workshop plan was designed according to Adıgüzel's (2006) phasing.

Climate Heroes: Questioning the Path to a Sustainable Future

***Topic*:** Does Nature Resent Us?

Group: 16 participants in the age group 9-10

Location: A suitable drama room or meeting hall

Time period: 45+45+45+45 min

Methods and Techniques: Creative Drama (small group improvisation, full group improvisation, role playing, frozen image), socratic method, brainstorming.

Tools and Materials: "The Rain Tree" story (Book of Tales from Mother Earth, Causse & Vezinet, 2018), visuals about nature and climate change, 4 pieces of kraft paper, paste glue, pencil, eraser and colored crayons, post-its.

Attainment:

1. Discusses the human-nature relationship.
2. Discusses the positive and negative aspects of the interaction between human and nature.
3. Discusses the solutions to overcome climate change.
4. Knows the threats posed to nature and life by mucilage, fossil fuel consumption, and greenhouse gas emissions.
5. Interpret the effects of global climate change through case studies.

Warming Up/ Preparation Phase

Activity 1: The workshop topic "Climate Action" is shared with the participants. Based on this topic, a chart prepared for the K-W-W-L technique is presented in order to mobilize their prior knowledge and determine the purpose of participation. Participants fill in the chart and submit it to the trainer. At the end of the workshop, they are informed that this chart will be handed to them again during the evaluation phase.

Table 1

K-W-W-L Chart

K	***W***	***W***	***L***
Put what you already know here (pre-workshop)	Write 2-3 questions you have here (pre-workshop)	Tell where you'll look to find your answers (pre-workshop)	Write answers to your questions and important information here (post workshop)

Activity 2: In this activity, the game "From Seed to Flower" which is taken from the Nonviolent Methods Handbook for Facilitators is played. Participants sitting in a circle are asked what words evoke nature, and the participants are listened to. Then the trainer says to the participants, "Let's close our eyes where we are sitting and become the seed form by lowering our heads forward". Then the trainer says, "When I say 'It rained', let's raise our heads. When I say 'The sun shone', let's stand on our knees. When I say 'The wind blew', let's slowly swing left and right. When I say 'Finally, the sun shone', let's hold hands. When I say 'It rained and I grew up, the wind blew and I swayed, the sun shone and I came to life, now I am a flower', let's jump and shout loudly 'I am a flower'." Then the trainer starts the game with the instruction 'It rained'.

Activity 3: Participants are grouped in pairs with the A-B counting method. The trainer asks them to sit face to face with their partners and shares the instruction. The instruction is as follows: "Now each of us will share with our partners an unusual and incredible event that happened to us. But this event will take place in the year 2063, not in the present day. Due to the climate crisis and drought, what kind of life would we expect in the world 40 years from now? Let us first think about this question and focus on a "moment" in the future. Then let's turn to our spouse and tell about that incredible and extraordinary event by making a sentence starting with 'Do you remember, one day.....'. Our partner, who listens to the event, will enrich your extraordinary story with his/her own ideas by forming a sentence starting with

'Yes, I remember. Even......'." After the instruction, they are given approximately 1 minute to think and at the end of the time, the sharing of each pair group is listened respectively.

Activity 4: Before the workshop, the trainer hangs on the walls of the room some images about nature and climate change. Participants walk freely in the space. While walking, they take turns to say "let's walk with the biggest step we can take... let's walk with the smallest step we can take... let's jump to the highest point we can jump... let's walk as if we are caught in the rain... let's walk as if we are stuck in the mud... let's walk as if we are walking on hot sand... let's walk with our normal steps... let's walk freely and carefully examine the visuals on the walls of the space... Let's choose the image that impresses us the most from these images, the one that prompts us to think, and let's take a sculpture form based on what it makes us think". After the participants take their forms, the person touched by the instructor, respectively, expresses what they feel based on this vision for a few seconds using action, word or both, and sits where they are. After the sharing of all participants, the activity is evaluated by sitting in a circle. During the evaluation process, the participants share their opinions about which visual they preferred and why, what emotions this visual evoked in them, and what it made them think/question.

Figure 1

Nature-1

Figure 2

Nature- 2

Figure 3

Climate Change-1

Figure 4

Climate Change-2

Improvisation Phase

Activity 5: Participants choose one of the cards with four different colors and four groups are formed, with those who choose the same color card forming one group. Within each group, the trainer divides the participants into A and B pairs. A and B are both the people in the dramatic situation. The A's demand that the rain tree should stay in their settlement on the grounds that it is necessary for their people. B's, on the other hand, wish to keep the rain tree in their settlement on the grounds that a shepherd from their community had raised it. Based on the story "The Rain Tree", the following dramatic scenario is shared with the participants.

Dramatic Scenario: You live in a village in the heart of the desert, where all the water wells have dried up and people are struggling with hunger and thirst. All the villagers are able to survive thanks to a single water source far, far away from your settlement. But it is very, very difficult and troublesome both to get to that water source and to carry that water to your village. One day, a young shepherdess in the village, with months of hard work, effort and sacrifice, grows a rain tree that gives drops of water, grows in all its splendor where you live and turns into a water source to meet the water needs of the whole community. The villagers in the village where the shepherd who sacrificially grew this rain tree lives say that the tree should stay there. Villagers in a nearby settlement uproot the tree on the grounds that their people are dying of thirst and therefore the tree should be replanted where they live.

When the participants are ready, they perform their role-playing and improvisation techniques.

Interim Evaluation: In this section- after the animations- the trainer reads the rest of the story and the socratic discussion process, which is the basis of philosophy for children practices, begins. Here, suggestions for questions that can be asked to the participants and that will initiate the socratic discussion are presented. However, these questions can be enriched in line with the workshop topic of "climate action" and the thoughts of the participants.

a. What do you think about the decision to move the rain tree to another location?
b. How would you interpret the relationship between humans and nature?
c. What are your thoughts on the dominance that people have established or believe they have established over nature?
d. What are the major problems of nature-human relations in the period we currently live in?
e. Under what conditions and circumstances are humans in the position of being able to control nature? Why?
f. What are the problems that cause climate change? What are your duties and responsibilities in solving these problems?

Activity 6: Based on the whole story, the first and second group of the four groups formed in the previous activity portray the people in the settlement where the tree is located, and the third and fourth groups portray the people in the settlement who wish to move the tree by using role-playing and improvisation techniques. In these portrayals, the people are expected to explain their justifications with their reasons.

Activity 7: The trainer divides the participants into four groups in a 1-2-3-4 counting order. The following dramatic scenario is shared with the participants and based on this dramatic scenario, the participants perform an enactment using role playing and improvisation techniques.

Dramatic Scenario: You live in a quiet town on the shores of the Mediterranean Sea, where fishing and agriculture are the main livelihoods. In this town, women are busy with field and garden work, men earn their living by fishing when the fishing season opens, and children swim and play in the sea with great pleasure. But when the fishing and agricultural season is over, some of the townspeople complain of unemployment. One day, a factory owner from a big city comes to this town and says that he wants to make an investment and builds a factory here. For the location of this factory, some of the trees in the forest land are cut down, then additional buildings are needed, and the forest land starts to disappear over time. People complaining of unemployment start to work in this factory. Over time, however, the agricultural people say that their crops are infested with insects, that they are not getting as much yield as they used to, and they begin to discuss among themselves what is causing this.

Those interested in fishing are distressed by the dead bodies of fish washed up on the shore and wonder why this is happening. Children complain that they cannot swim in the sea as they used to and that a slippery and sticky layer of liquid forms (mucilage) on the sea surface. Could the reason for these events be the factory built in this settlement? What if dozens of people working in the factory have to quit their jobs? After the reenactments, the group shares are evaluated and the causes and solutions to these problems are discussed using the socratic discussion method.

Interim Evaluation: After the discussions, the participants are asked what they are aware of, what they think about global climate change and how these studies can be related to this issue. They are asked to think about and share their views on the question of what duties and responsibilities people and institutions/managers may have regarding global climate change. Then, within the framework of the topic discussed, the causes of global climate change, the threat to nature and life posed by mucilage, fossil fuel consumption and greenhouse gas emissions, and the duties and responsibilities of individuals and institutions in this regard are shared with the participants in a short presentation by the trainer.

Evaluation/Discussion Phase

Activity 8: Participants come together again in the groups indicated in the previous activity. Each group is provided with a piece of craft paper and crayons. Based on the activities carried out during the process, group participants write the problems and solutions they encounter on post-its and stick them horizontally on the lower part of the cardboard. On the wide upper part of the cardboard, they design a striking poster emphasizing the relationship between nature and human beings and write a slogan. When the group work is finished, each poster is hung on the wall of the hall and the groups examine and evaluate each other's work.

Activity 9: The K-W-W-W-L chart, the first activity of the workshop, is handed to the participants again. The last heading of the chart, "L- What I learned?" is filled in by the participants at the end of the workshop. The trainer answers any questions that the participants have about climate action for sustainable development purposes. The workshop ends with good wishes for a sustainable world.

Discussion and Results

Global society is facing the threat of the extinction of ontological continuity. The transition of sustainability from an idea to a concept is a result of the large-scale damage to the ecosystem brought about by economic and social developments in the twentieth century (Bozlağan, 2005). In order to produce solutions for sustainable development, it is essential to reach a consensus with the solution proposals of different perspectives working in different disciplines (Tutulmaz, 2012). Yapıcı (2003) states that especially television programs, cartoons and thematic films should be utilized to teach the philosophy of sustainable development to individuals. He also states that it may be effective for institutions to develop incentive methods in the preparation of cartoons, documentaries and thematic films. The primary goal in sustainability is for educational institutions to reflect the philosophy of sustainable development in their curricula.

While each country adopts a different approach to this issue, the Ministry of National Education, as the institution responsible for education in Turkey, endeavours to transform the actions emphasised in both national and international documents into daily life within the scope of combating climate change. When similar studies in the literature related to the subject were examined, it was found that there were studies in which activity plan suggestions were presented in the process of teaching the "sustainable development unit" of the secondary education science course with creative drama method (Dursun, 2022) and augmented reality applications (Tün, Kışoğlu, & Uzun, 2018). However, a similar study in the field of basic education has not yet been found.

The main topics addressed in this regard can be listed as improving the quality of education, ensuring green and digital transformation in education, and developing a culture of democracy in individuals from early childhood. Within the scope of combating climate change in schools, the vision of implementing the "Whole School Approach" is adopted, and it is stated that the best interests of the child and nature will be considered in this process. It is planned to integrate climate change education into the basic education curriculum, update curricula in line with environmental and climate change issues, and organize climate workshops in schools (MoNE, 2023a).

Recommendations

Sustainability activities in curricula should be carried out through different practices designed by qualified teachers equipped with 21st century skills in accordance with the interests, needs and age levels of students. These practices can be a philosophy-based creative drama workshop for children, which is presented in detail in the research, or different studies that will help students understand sustainability issues more deeply by interacting, experiencing and learning.

The aim of these practices is to ensure that students not only learn about sustainability, but also recognize how to utilize this knowledge in their daily lives and social interactions. For example, students can be provided with the opportunity to develop projects that address environmental issues or provide social benefits. Students can design projects in groups on topics such as waste management, energy conservation, social equality, etc. and work on real-world problems by implementing these projects. They can develop various voluntary service projects to benefit society. Projects such as cleaning parks, encouraging the use of public transportation, and protecting local water resources can raise awareness of sustainability among students. Various simulations and games can be employed to understand sustainability issues. Climate change simulations, resource management games or decision-making games can provide students with skills to solve complex sustainability problems. Visiting environmentally friendly energy production facilities, recycling facilities, organic farms, etc. with students can enable students to combine theoretical knowledge with practice.

At the same time, students can be supported to organize campaigns or awareness-raising activities to raise awareness on sustainability issues. These activities will help them develop their communication and leadership skills and raise awareness about sustainability issues in society. Critical thinking skills can also be developed by giving students tasks to analyze international news, articles or statistics related to sustainability. Such tasks will allow students to evaluate real world events from a sustainability perspective.

Finally, if the workshop plan presented in detail is implemented, the participants will be able to bring a different perspective to the universal concepts discussed, to be aware of the universal call for action and to gain knowledge about producing solutions, to be able to analyze and evaluate the views presented, to have the opportunity to experience the negativities or impossibilities experienced instead of remaining neutral or insensitive to some of the problems that exist in the world, It is believed that it will contribute to their ability to propose solutions to the issues addressed within the framework of development goals, to realize their responsibilities as individuals in protecting the world on which they live, to ensure that all living things live in peace and tranquility, and to support them to grow up as thoughtful and sensitive individuals.

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