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Investigation of Life Satisfaction Levels in Adults in Terms of Some Variables: North Cyprus Example

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Life satisfaction, which reflects an individual's level of satisfaction with life, their psychological well-being, and their sense of happiness, represents the cognitive dimension of subjective well-being. Life satisfaction entails a cognitive process that involves subjective evaluations of one's own life. Well-being, a concept that guides the policies of nations, has been the subject of extensive research as a holistic concept encompassing life satisfaction. Understanding and examining the life satisfaction of Turkish Cypriots are important for enhancing individuals' quality of life, providing psychological support, and advancing societies toward a healthier and happier future. This study aims to investigate the levels of life satisfaction among Turkish Cypriot adults in relation to select variables and metaphorical perceptions. The data were collected from 191 volunteers through a simple random sampling method. Content analysis was performed on the responses to open-ended questions about life satisfaction. The results indicated that participants' life satisfaction levels were moderate (M=4.77, SD=.81). The participants generated 62 metaphors to describe life satisfaction, with the most commonly used metaphor being "happiness." Additional findings from the study are presented in the results section. The results of this study are discussed within the context of relevant literature in the discussion section.

Yetişkinlerde Yaşam Doyum Düzeylerinin Bazı Değişkenler Açısından İncelenmesi: Kuzey Kıbrıs Örneği

Makale Bilgileri | **ÖZ**

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Bireylerin yaşadığı hayata dair tatmin düzeyini, psikolojik refahlarını ve mutluluk hissini yansıtan yaşam doyumu kavramı öznel iyi oluş kavramının bilişsel boyutunu ifade etmektedir. Yaşam doyumu kavramı, bireyin kendi yaşamı ile ilgili öznel değerlendirmelerini içeren bilişsel bir süreci ifade etmektedir. Ülkelerin politikalarına yön veren iyi oluş yaşam doyumunu içeren bütüncül bir kavram olarak araştırmalara konu olmaktadır. Bu kavramın Kuzey Kıbrıs örneklemi bağlamında anlaşılması ve incelemesi, bireylerin yaşam kalitesini artırma, psikolojik destek sağlama ve toplumun daha sağlıklı ve mutlu bir geleceğe ilerlemeleri için önem taşımaktadır. Bu çalışma Kuzey Kıbrıs'ta yaşayan yetişkinlerin yaşam doyumunu bazı değişkenler açısından incelemektedir. Çalışmanın verileri 191 gönüllü katılımcı üzerinden toplanmıştır. Yaşam doyumu ile ilgili açık uçlu sorulara verilen yanıtlar üzerinde içerik analizi gerçekleştirilmiştir. Araştırma sonuçlarına göre katılımcıların yaşam doyumu düzeyleri orta düzeydedir (M=4.77, SD=.81). Açık uçlu sorulara verilen yanıtların analizi neticesinde 62 metofor ortaya çıkmıştır. Katılımcılardan yaşam doyumu ile ilgili elde edilen metaforların çoğunluğunun mutluluk ile ilgili olduğu tespit edilmiştir. Çalışmanın diğer sonuçları bulgular bölümünde sunulmuş, tüm bulgular ilgili literatür ışığında tartışılmıştır.

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INTRODUCTION

The concept of life satisfaction, which emerged during the Age of Enlightenment in the 18th century, served as a source of inspiration for individuals seeking a fulfilling life throughout the 19th century. Towards the latter part of the 20th century, intellectuals made concerted efforts to refine the concept of life satisfaction by delineating its components and devising appropriate measurement methods (Prasoon & Chaturvedi, 2016). During this period, which was characterized by the evolution of the concept, some researchers (Campbell, Converse, & Rodgers, 1976; Andrews & Withey, 1976; Estes, 1984; Glatzer, Zapf, & Berger, 1984) identified the determinants of life satisfaction as social relationships, health, work-related circumstances, personal well-being, freedom, along with elements linked to moral values and personality traits.

In the present day, happiness is increasingly recognized as a fundamental goal in human life. In light of the extensive research conducted in this field, nations are actively working towards enhancing well-being through life satisfaction, which represents a multidimensional construct (Ruggeri et al., 2020). Life satisfaction, often used interchangeably with the concept of happiness, is categorized as the cognitive component of subjective well-being (Diener et al., 1985). Kushlev et al. (2021), along with Diener (1984), have defined life satisfaction, positive affect, and negative affect as integral components of subjective well-being. In a separate study, life satisfaction was described as the critical process and evaluation of an individual's life (Dağlı & Baysal, 2016). Life satisfaction essentially encompasses an individual's cognitive assessment, and this judgment is highly personalized. It involves the individual's decision to find contentment in various aspects of their life, such as marriage, education, and work (Alıcı & Seçim, 2020).

Well-being, which significantly influences the policies of nations, has been the subject of research as a comprehensive concept, encompassing life satisfaction. The primary objective of this study is to assess the levels of life satisfaction in adults, taking into account specific variables and metaphorical perceptions. It is anticipated that determining the levels of life satisfaction and individuals' perceptions regarding it will contribute to increasing the overall life satisfaction of the Turkish Republic of North Cyprus (TRNC), which is a developing nation. Khodabakhsh (2022) underscored the paucity of studies on life satisfaction in developing countries, with the majority of such research being conducted in Western nations.

Numerous factors have been demonstrated to have a relationship with life satisfaction. Gender is a variable that has been extensively examined in many studies on life satisfaction. For instance, a study investigating the impact of gender on life satisfaction by Luhmann et al. (2012) found that women tend to report lower life satisfaction compared to men. Another closely linked factor is relationship status, with research by Proulx et al. (2007) revealing that individuals in relationships generally experience higher life satisfaction. Factors such as the availability of parents, employment status, social support, age, education level, and personal income may also influence life satisfaction (Umberson et al., 2010; Scheier et al., 1989; Sarason et al., 1987; Mroczek & Spiro, 2015; Diener & Oishi, 2000; Pavot & Diener, 2008). However, focusing solely on these variables may not provide a comprehensive understanding of life satisfaction. The role of metaphorical perceptions may be significant in comprehending life satisfaction. Metaphors are integral to language and thought, aiding individuals in understanding their experiences (Lakoff & Johnson, 1980). Exploring metaphorical perceptions regarding life satisfaction can offer individuals improved insights into and explanations of their life satisfaction experiences. For example, the impact of the metaphor "life is a journey" on an individual's life satisfaction, where life's challenges and experiences are likened to a journey, can provide profound insight into life satisfaction (Landau & Meier, 2011).

This study aims to provide a comprehensive exploration of the factors influencing life satisfaction by delving into the relationships between life satisfaction and variables such as gender, relationship status, age, education level, personal income, and overall life satisfaction. Additionally, the study will investigate the role of metaphorical perceptions, shedding light on how these factors impact life satisfaction. The objective is to offer a current and in-depth understanding of the intricate dynamics associated with life satisfaction in North Cyprus.

This study aims to address the following research questions:

1- What is the level of life satisfaction perceived by the participants?

2- Do the perceived life satisfaction levels of the participants differ significantly according to socio-demographic variables?

3- What are the metaphors of the participants about life satisfaction?

4- What categories can the metaphors created by the participants regarding life satisfaction be classified in terms of their similarities?

METHOD

In this section, the research model, participants, data collection tool, and the data analysis process following data collection are outlined.

Research Design

The mixed-methods model was employed in this research, using the convergent parallel design. This study aimed to enhance the depth and reliability of its results by incorporating both quantitative and qualitative data. This approach entails the combination of quantitative and qualitative data, with simultaneous data collection being a fundamental feature of the convergent parallel mixed-method design. In this method, the data collected during the quantitative research phase from the sample served as the secondary sample necessary for gathering qualitative research data (Creswell, 2015). During the analysis process, data are separately analyzed according to the principles of qualitative and quantitative research within the convergent parallel mixed-methods design. The verification of the findings obtained is illustrated in Figure 1 (Creswell & Creswell, 2017). It is crucial to note that, within this framework, qualitative and quantitative data convey distinct types of information.

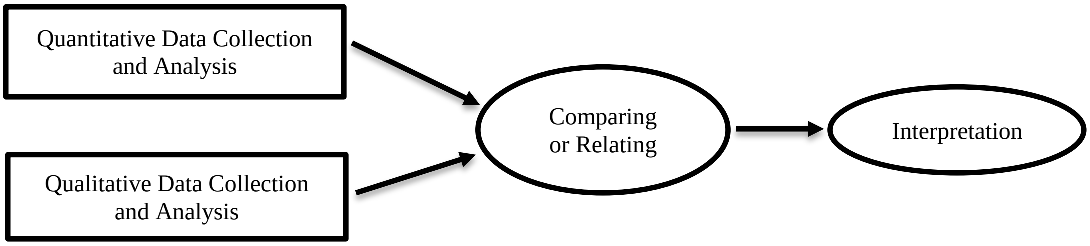

Figure 1. Convergent Parallel Mixed Method Pattern (Creswell, 2015, 78)

This study aimed to enhance the depth and reliability of its results by incorporating both quantitative and open ended data. Both quantitative and open-ended data were collected to amplify the reliability of the present study, establishing a robust basis for the data analysis process. Accordingly, participants answered the questionnaire in one face-to-face session. The quantitative data and the responses to open-ended questions about life satisfaction were analyzed in this study.

Divergent approaches were employed to enrich the findings of the study. One of them was the survey model, which is considered a research approach aimed at describing past or present situations. It seeks to provide an explanation of the event, object, or individuals under study within their current circumstances (Karasar, 2012). Also, a phenomenological approach was employed with open-ended questions in this study. Phenomenology involves researching events that are not fully understood or familiar to us (Yıldırım & Şimşek, 2018). At the same time, this study explored adults' perceptions of life satisfaction through metaphors. The concept of metaphor can be described as a method of elucidating a concept, phenomenon, or event under investigation by drawing an analogy with an entirely different concept, phenomenon, or event (Saban, 2008).

Participants

The quantitative data were gathered from 191 volunteers (individuals residing in North Cyprus between 2021 and 2022) who provided feedback for the data. Simple random sampling was employed. Sample size recommendations vary, with Bryman and Cramer (2001) suggesting at least five times, Nunnally (1978) proposing ten times, and Gorusch (1983) suggesting fifteen times the number of items in the scale for conducting the necessary analysis. Kline (2016) indicates that participants should be at least 20 times larger than the number of items in the scale to yield reliable results. The study ensured that the number of participants exceeded 20 times the number of items on the scale. Accordingly, the data were collected from 191 participants, with 60.7% being female and 39.3% male, using the simple random sampling method. In a simple random sample, each participant's probability of being selected from the population is equal, and the choice of one participant does not influence the selection of others (Altunışık et al., 2005). 49.2% of the participants were in the 20-39 age group, 37.7% were in the 40-59 age group, and 13.1% were in the 60 and above age group. 68.6% of the participants were in a relationship. While 91.1% of the group had living mothers, 83.2% of them had living fathers. 70.2% were employed, and 75.4% reported having social support. Educational backgrounds varied, with 29.8% having associate degrees or less, 37.7% having bachelor's degrees, and 32.5% holding postgraduate degrees. Income levels were distributed as follows: 31.4% low-income, 55.5% moderate-income, and 13.1% high-income. Half of the participants (50.3%) expressed satisfaction with their lives. Qualitative data were collected from 83 volunteers out of 191 participants who provided feedback for the quantitative data. A total of 83 participants were included in the qualitative data analysis, with 57.8% being female and 42.2% male. Age distribution was as follows: 47% in the 20-39 age group, 38.6% in the 40-59 age group, and 14.4% in the 60 and above age group. In terms of relationships, 69.9% of participants were in a relationship, 30.1% had living mothers, 95.2% had living fathers, 92.8% were employed, and 77.1% had social support. Regarding education, 28.9% had associate degrees or less, 42.2% had bachelor's degrees, and 28.9% held postgraduate degrees. Income levels were distributed as follows: 24.1% low income, 62.6% moderate income, and 13.3% high income. A significant portion (46.9%) of the participants reported being satisfied with their lives.

Research Instruments and Processes

To collect quantitative data during the data collection phase of the research; The Riverside Life Satisfaction Scale (RLSS) and open-ended question form were used.

The Riverside Life Satisfaction Scale (RLSS)

The Riverside Life Satisfaction Scale, initially developed by Margolis et al. (2019) and for which a Turkish validity and reliability study was conducted by Alıcı and Seçim (2020), was employed. The scale is structured as a seven-point Likert type, with 1 representing "strongly disagree" and 7 representing "strongly agree." RLSS consists of six items, three of which are reverse-coded (items 2, 4, and 6), and they load onto a single factor. For example, items include statements like "I like the way my life is going" and "I want to change the course of my life.". Higher scores on the scale indicate a higher level of overall life satisfaction. The original study by Margolis et al. (2019) reported that RLSS demonstrated high validity and reliability values. In the study conducted by Alıcı and Seçim (2020), the Cronbach's Alpha value was found to be .78.

Open-Ended Question Form

To gather data from the participants, the data collection process was divided into three parts. In the first part, an open-ended question was used to collect demographic information. The second part involved the administration of the 'Life Satisfaction Scale' to acquire quantitative data. In the third part, participants were asked to share their metaphorical perceptions of life satisfaction, which aimed to provide qualitative insights. This approach allowed for a comprehensive data collection process, encompassing both quantitative and qualitative aspects, ensuring a well-rounded analysis. This open-ended question is 'Satisfaction with life …. like/similar; because….' formed in the form. Participants who filled in the demographic information and life satisfaction scale in this section were asked to explain the metaphor of life satisfaction in the third section. In the qualitative research part, the answers of those who gave feedback to the metaphor section were analyzed.

Data Analysis

The data were analyzed by employing the SPSS program. Initial steps included addressing missing data and the exclusion of inappropriate (empty spaces, double answers, meaningless answers, etc.) entries. Additionally, any reverse-scored items were adjusted accordingly. Subsequently, the distribution of the data was assessed for normality. Tabachnick and Fidell (2013) suggest that if kurtosis and skewness values fall within the range of -1.5 to +1.5, the data can be considered normally distributed. In this study, the data exhibited a kurtosis value of -.331 and a skewness value of -.229, indicating a normal distribution. Consequently, parametric analyses were deemed appropriate for yielding more accurate results. Frequency and percentage values were calculated and presented in a table. For the first sub-problem of the research, the scale's mean and standard deviation were computed. Following this, t-tests were conducted to examine participants' attitudes toward life satisfaction based on factors such as gender, relationship status, parental status, employment status, receipt of social support, as well as variables like age, education level, personal income, and overall life satisfaction. In instances where significant differences were identified, the Scheffe test was employed to determine which specific groups exhibited these differences.

Data obtained in the open-ended question part of the research was analyzed using a method known as content analysis. This approach was considered suitable for a metaphor study as it enables data to be conceptualized and the extracted concepts to be organized within thematic frameworks (Yıldırım & Şimşek, 2018). Out of 191 collected responses, 83 were selected for metaphor analysis based on the judgments of researchers and experts working in two independent qualitative research fields. The data analysis process followed the steps proposed by Saban et al. (2006), which include: 1) Naming/labelling stage, 2) Sorting (explanation and elimination) stage, 3) Reorganizing and compiling stage, 4) Providing validity and reliability stage. Similar steps were employed in the data analysis procedures of numerous prior studies (Akçay, 2016; Kılıç, 2022; Saban, 2008). The analysis process involved several stages:

Naming/Labeling Stage: At this stage, the data were entered into the Microsoft Excel program, and the metaphors provided by the participants were organized in alphabetical order. Responses where participants left the reasons for creating the metaphors blank were excluded. Additionally, metaphors that were incomprehensible or illogical were removed from the dataset. In total, 22 responses were excluded, leaving 83 with suitable metaphors and justifications for further evaluation.

Sorting (Explanation and Elimination) Stage: During this stage, the raw data were carefully examined to identify similarities or common features among the metaphors. Metaphors that lacked logical and explanatory reasons were eliminated from the dataset. As a result, 22 responses were excluded.

Reorganizing and Compiling Stage: In this phase, the metaphors were further reviewed, and those that best represented the intended metaphor were selected. These metaphors were then grouped based on the reasons behind their creation. The study identified four main groups: "Life Satisfaction as a

Necessity-Positive Situation," "Life Satisfaction as Uncertainty," "Life Satisfaction as Balance," and "Life Satisfaction as a Negative Concept."

Providing Validity and Reliability Stage: The metaphors created by the participants, along with their justifications, were included in the study as they were. Expert opinions were sought to create the categories, and the categories were established based on these inputs. To ensure the reliability of the analysis, the intercoder reliability calculation formula developed by Miles and Huberman (1994) was employed (Reliability = Consensus / (Consensus + Disagreement) x 100). The research achieved a reliability score of 97%. A reliability result of 90% or more is considered reliable, as per Miles and Huberman (1994). Therefore, the study can be considered reliable.

Ethic

Cyprus Science University Ethics Committee approval was obtained (06.04.2022, 2022/04.009) for this study.

RESULTS

In this section of the research, the findings pertaining to each of the questions created in alignment with the overarching objective are presented. The data analysis for the quantitative phase of the research was conducted initially, followed by the analysis of the qualitative component of the study.

Findings Regarding the Quantitative Part of the Study

This section provides the means and standard deviations of participants' perceptions of life satisfaction. Additionally, it examines whether participant characteristics such as age, gender, education level, relationship status, parental status, employment status, personal income, availability of social support resources, and overall life satisfaction differ with respect to age groups.

Participants' perceptions of life satisfaction were compared based on gender, relationship status, parental status, employment status, and social support status. The data are presented in Table 1.

Table 1. *T-Test for Participants' Perceptions of Life Satisfaction*

Variable	Groups	N	M	SD	DF	t	p
Gender	Female	116	5.03	.87	189	1.18	.23
	Male	75	4.87	.95			
Relationship Status	Yes	131	5.03	.88	189	1.43	.15
	No	60	4.83	.93			
Is Mother Alive?	Yes	174	4.97	.06	189	.22	.82
	No	14	4.92	.24			
Is Dad Alive?	Yes	159	4.92	.06	189	-1.35	.17
	No	32	5.16	.18			
Employment Status	Yes	134	5.01	.06	189	2.85	.00*
	No	57	4.64	.14			
Social Support	Yes	144	5.06	.07	189	2.61	.01*
	No	47	4.67	.14			

*p<.05, **p<.01

The mean life satisfaction score for participants was determined to be M=4.97 (SD=.90), indicating a moderate level of life satisfaction. Participants' perceptions of life satisfaction were examined with regard to their gender, relationship status, the status of their parents being alive, employment status, and social support. The t-test results revealed that participants' perceptions of life satisfaction did not significantly differ based on gender, relationship status, and whether their parents were alive or not (t=.1.18, t=1.43, t=.22, t=-1.35, p>.05). However, there were significant differences in participants' perceptions of life satisfaction concerning employment status, with working participants having higher scores (M=5.01, t=2.85, p<.05), as well as social support, where those with social support reported higher life satisfaction scores (M=5.06, t=2.61, p<.05). The participants' perceptions of life satisfaction were compared according to age, education level, personal income, and overall life satisfaction. The data obtained are presented in Table 2.

Table 2. *ANOVA Test of Participants' Perceptions of Life Satisfaction*

Variable	Groups	N	M	SD	F	p	Difference
Age	20-39	94	4.92	.90	.23	.79	-
	40-59	72	5.01	.92			
	60 and above	25	5.01	.85			
Education Level	Associate Degree and Before	57	4.69	1.01	4.38	.01*	1-3
	Undergraduate	72	5.01	.63			
	Graduate	62	5.16	1.01			
Personal Income	Low	60	4.71	.98	4.04	.01*	1-3
	Middle	106	5.04	.82			
	High	25	5.26	.91			
Life Satisfaction in	Dissatisfied	22	4.21	1.05	17.85	.00*	1-2
General	Moderately Satisfied	73	4.77	.81			1-3
	Satisfied	96	5.28	.79			2-3

*p<.05, **p<.01

As presented in Table 2, an ANOVA test was conducted to compare participants' perceptions of life satisfaction with respect to their age, education level, personal income, and overall life satisfaction. The ANOVA results revealed that participants' perceptions of life satisfaction did not significantly differ concerning the age variable ($F=.23$, $p>.05$). However, significant differences were observed in participants' perceptions of life satisfaction in relation to their education level ($F=4.38$, $p<.05$), personal income ($F=4.04$, $p<.05$), and overall life satisfaction ($F=17.85$ $p<.05$).

Further examination of Table 2 revealed that the difference in the "education level" variable primarily stemmed from variations between the groups of participants with associate degrees and below, undergraduates, and graduate degrees. Participants with a graduate education level (M=5.16) were found to have significantly higher perceptions of life satisfaction compared to participants with an associate degree or lower education (M=4.69).

In the case of the "personal income" variable, the difference was primarily between the low and high-income groups. Participants with higher personal income (M=5.26) were found to have significantly higher perceptions of life satisfaction compared to those with low personal income (M=4.71).

Regarding the "life satisfaction in general" variable, significant differences were found among the dissatisfied, moderately satisfied, and satisfied groups. Participants who reported being moderately satisfied with life (M=4.77) exhibited significantly higher perceptions of life satisfaction compared to those who were dissatisfied (M=4.21). Additionally, participants who reported being satisfied with life (M=5.28) had significantly higher perceptions of life satisfaction compared to dissatisfied participants (M=4.21). Lastly, participants who reported being generally satisfied with life (M=5.28) also had significantly higher perceptions of life satisfaction compared to those who were moderately satisfied with life (M=4.77).

Findings Regarding the Open-Ended Question Part of the Study

In this section of the study, the metaphors created by the participants in relation to life satisfaction were analyzed. These metaphors were initially organized in a table based on the participants' names, and their frequencies were documented. Subsequently, the metaphors were categorized, and each category was substantiated with direct quotations from the participants' responses. The metaphors proposed by the participants based on their life satisfaction are displayed in Table 3.

Upon reviewing Table 3, it was evident that the participants generated a total of 62 metaphors. The most frequently used metaphor to describe life satisfaction was the term "happiness" (n=6). In addition, metaphors such as "spending time with friends" (n=3), "peace" (n=3), and "water" (n=4) were also commonly employed. Subsequently, the metaphors developed by the participants were categorized based on their shared themes. The categories derived from the metaphors created by the participants are presented in Table 4.

Table 3. *Metaphors Developed by Participants Regarding Life Satisfaction*

Metaphor No.	Metaphor	N	Metaphor No.	Metaphor	N
1	Happiness	6	**32**	Breakfast	1
2	Water	4	**33**	Good things	1
3	Tree	2	**34**	Mixed juice	1
4	Spend time with friends	3	**35**	Butterfly	1
5	Peace	3	**36**	Stand on one's own legs	1
6	Eat Something	2	**37**	Taking time for oneself	1
7	Human	2	**38**	Personal development steps	1
8	Achieving goal	2	**39**	Mental health	1
9	Enjoying life	2	**40**	Unblown roses	1
10	Life	2	**41**	Breathing	1
11	Flower	2	**42**	Following the flow of the river	1
12	Chess	2	**43**	What & how much do you want	1
13	Drinking water	2	**44**	Obese human	1
14	Child's game	1	**45**	Ocean	1
15	Deep Breathing	1	**46**	Money	1
16	Drinking sea water	1	**47**	Making money and having power	1
17	Bottom hole container	1	**48**	Health	1
18	Steering wheel	1	**49**	Chocolate	1
19	Tomato	1	**50**	People I love	1
20	Insatiability	1	**51**	Love	1
21	Marriage	1	**52**	Social environment	1
22	Mortal	1	**53**	Gold	1
23	Physiological necessity	1	**54**	Surprise	1
24	Rainbow	1	**55**	Balance in the scale	1
25	Environment	1	**56**	Satiety	1
26	Habit of the country we are in	1	**57**	Soil	1
27	Retiring from a job	1	**58**	Utopia	1
28	Hobbies	1	**59**	Half empty glass	1
29	Friend and family	1	**60**	Phoenix	1
30	Set of uncertainties	1	**61**	Rebirth	1
31	Doing business	1	**62**	Climb to the top	1
				Total	83

Table 4. *Categories Created for Life Satisfaction*

Category	Metaphor	N	%
Life Satisfaction as Necessity-Positive Situation	Life (1), Flower (1), Chess (1), Tree (2), Gold (1), Phoenix (1), Friends and Family (1), Spend Time with Friends (3), Retiring from a Job (1), Breakfast (1), Butterfly (1), Stand on one's own legs (1), Taking Time for Oneself (1), Personal Development Steps (1), Mental Health (1), Happiness (6), Breathing (1), Environment (1), What & how much do you want (1), Chocolate (1), Child's Game (1), Deep Breathing (1), Ocean (1), Money (1), Making Money and Having Power (1), Health (1), Tomato (1), People I love (1), Love (1), Social Environment (1), Water (4), Drinking Water (2), Marriage (1), Physiological Necessity (1), Enjoying Life (2), Achieving Goal (2), Hobbies (1), Peace (3), Human (2), Doing Business (1), Good Things (1), Satiety (1), Rebirth (1), Climbing to the Top (1)	61	73.5
Life Satisfaction as Uncertainty	Rainbow (1), Half Empty Glass (1), Steering wheel (1), Set of Uncertainties (1), Mortal (1), Surprise (1), Life (1),	7	8.4
Life Satisfaction as Balance	Mixed Juice (1), Insatiability (1), Eating Something (2), Balance on the Scale (1), Flower (1),	6	7.2
Life Satisfaction as Negative Concept	Soil (1), Following the Flow of the River (1), Unblown Roses (1), Chess (1), Habit of the country we are in (1), Bottom hole container (1), Obese Human (1), Drinking Sea Water (1), Utopia (1)	9	10.9

Upon reviewing Table 4, it becomes evident that the category "life satisfaction as a necessity-positive situation" includes 6 instances of the metaphor "happiness" 4 instances of "water" and 3 instances each of "peace" and "spending time with friends". Additionally, there are metaphors expressed twice or once. An analysis of the metaphors within the category of "life satisfaction as a necessity-positive situation" suggests that the participants perceive life satisfaction as a crucial and positive concept. Below are some of the participants' explanations related to the metaphors in the "satisfaction with life as a necessity-positive situation" category: "Life satisfaction is like happiness because if you enjoy life and colour it, you will find happiness."

The category "Life satisfaction as uncertainty" is represented by the metaphor "rainbow" which was expressed once. Other metaphors in this category include "half-empty glass", "steering wheel", "set of uncertainties", "mortal", "surprise", and "life". These metaphors collectively suggest that the participants view life satisfaction as an ambiguous concept. Below are some of the participants' explanations related to the metaphors in the "satisfaction with life as uncertainty" category: "Life satisfaction is like a set of uncertainties; as we live with uncertainty where, when, with whom, in what environment, the direction of our lives, and all the events we will experience".

Within the category of "life satisfaction as balance", two metaphors were associated with "eat something", and one was related to "mixed juice". Additional metaphors within this category include "insatiability", "balance on the scale", and "flower". The metaphors in this category collectively suggest that participants perceive life satisfaction as a concept that requires balance. Below are some of the participants' explanations related to the metaphors in the "satisfaction with life as balance" category: "Life satisfaction is like eating something because if you eat in balance, you will be healthy, and you will understand that you are full. You will neither starve nor swell. It is important to be in balance".

The category "Life satisfaction as a negative concept" comprises metaphors expressed once. These metaphors include "earth", "following the flow of the river", "unblown roses", "chess", "the mindset of the country we are in", "a pot with a hole in the bottom", "obese person", "drinking seawater", and "utopia". The presence of these metaphors in this category suggests that the participants view life satisfaction as a negative concept. Below are some of the participants' explanations related to the metaphors in the “satisfaction with life as a negative concept” category: “Life satisfaction is like an obese person because he always wants more”.

DISCUSSION

The study delved into life satisfaction through quantitative research, considering various factors such as age, gender, relationship status, the status of participants' parents, employment status, social support, education level, personal income, and overall life satisfaction. In terms of general life satisfaction, participants who reported being moderately satisfied exhibited higher levels of life satisfaction compared to those who were dissatisfied with life. To provide a more profound and comprehensive analysis, a mixed method design was employed in this study, combining both qualitative and quantitative data collection methods to gain a more detailed understanding of the phenomenon (Alkan et al., 2019).

The study also explored the employment status variable and revealed that participants who were employed reported higher levels of life satisfaction compared to those who were not working. This finding aligns with existing literature. Hatipoğlu and Tuncay (2021) found a positive correlation between income levels and life satisfaction among non-working individuals. Employees and those content with their jobs tend to express higher levels of life satisfaction (Amati et al., 2018). Additionally, it has been observed that the life satisfaction of unemployed men is lower than that of unemployed women (Joshanloo & Jovanović, 2018). Erdiç (2018) discovered that married individuals who were employed exhibited higher life satisfaction levels than those who were not employed. Based on these findings, it can be concluded that being gainfully employed, particularly when coupled with job satisfaction, has a positive impact on life satisfaction.

In this study, it was observed that the participants' perceptions of life satisfaction did not exhibit significant differences based on their relationship status. However, it is worth noting that this finding contrasts with the results reported in existing literature, which suggest that relationship status plays a significant role in determining life satisfaction scores. Research has shown that individuals in a romantic relationship tend to have higher levels of life satisfaction compared to those who report having no romantic ties (Amati et al., 2018). Conversely, being divorced or widowed is associated with lower life satisfaction (Joshanloo & Jovanović, 2018). Furthermore, Erdinç (2018) pointed out that married men reported significantly higher life satisfaction compared to married women, and a positive relationship between marital adjustment and life satisfaction was observed. Dağlı and Baysal (2017) also noted significant differences in life satisfaction based on marital status. Establishing romantic relationships, which can serve as sources of social support, is one of the variables that influence life satisfaction.

Upon examining the variable of social support, it was noted that participants who reported having social support demonstrated higher levels of life satisfaction compared to those without social support. No significant differences were identified in relation to the variables of mother and father's status (alive or not) and life satisfaction. Notably, a significant result emerged when analyzing the metaphor "spend time with friends," which featured prominently in the qualitative findings, in connection with the social support variable at the quantitative level. Given the outcome that individuals with social support tend to have higher perceptions of life satisfaction, it can be inferred that metaphors like "spend time with friends," "friends and family," "environment," "social environment," and "people I love" support the quantitative findings. Social support plays a crucial role in influencing individuals' life satisfaction, and those with social support appear to have chosen metaphors that convey their life satisfaction, falling within the category of life satisfaction as a necessity-positive situation. In this regard, the qualitative and quantitative data analyzed in the present study mutually reinforced each other.

Uludağ and Çınar (2021) discovered a significant and positive correlation between social support and life satisfaction, supporting the notion that social support plays a vital role in individuals' satisfaction with life. Additionally, research has consistently revealed a positive connection between friendship and life satisfaction. The strength and quality of friendships have been identified as critical factors in this relationship (Amati et al., 2018). Friendships, characterized by their voluntary, mutual, sincere, and enduring nature, serve as a protective shield for dealing with stress, promoting healthy behaviors, safeguarding against risks, enhancing well-being, and shielding individuals from the adverse consequences of negative life events. However, it is worth noting that friendship relations can also have adverse effects, including criticism, discrimination, and negative habits. Nevertheless, positive aspects of friendships such as support, trust, and intimacy, as well as factors like the frequency of contact and satisfaction derived from these relationships, are associated with higher levels of life satisfaction (Amati et al., 2018). Consequently, social support stands out as a crucial factor for individuals in dealing with life's challenges and, as a result, experiencing greater life satisfaction, especially given that humans are inherently social beings.

The research results indicated that participants with a postgraduate education level reported higher levels of life satisfaction than those with an associate degree or lower. The significant findings related to the education level variable in the quantitative results aligned with metaphors derived from the qualitative research, specifically those in the category of life satisfaction as a necessity-positive situation. Metaphors such as 'personal development steps,' 'retiring from a job, taking time for oneself,' and 'achieving goals' support the quantitative findings. Likewise, the quantitative findings concerning the personal income variable are corroborated by metaphors within the life satisfaction as a necessity-positive situation category, including 'standing on one's own legs,' 'money,' 'making money and having power,' 'doing business,' and 'climbing to the top.' A study conducted by Ünal et al. (2001) with physicians found that job satisfaction is the most influential factor in life satisfaction. This observation is in line with research, emphasizing high life satisfaction in professions requiring undergraduate and graduate education. Additionally, in a study by Dağlı and Baysal (2017) involving teachers with a high level of education, it was found that their satisfaction levels were high. These findings further support the positive relationship between education level and life satisfaction, which is consistent with the results of the research.

When the personal income variable was examined, it was found that the participants with a high personal income had higher levels of life satisfaction than those with a low personal income. Dağlı and Baysal (2017) found that life satisfaction differs significantly according to monthly income.

Research findings suggested that there was no significant difference between age and life satisfaction among the participants. These results are in contrast to some previous studies, such as Dağlı and Baysal (2017), which found differences in life satisfaction based on age. The literature on age and life satisfaction indeed presents mixed findings, with some studies indicating differences across age groups while others show no such variations. The relationship between age and life satisfaction is complex and may depend on various factors, including life conditions and individual differences. It is clear that more research is needed to fully understand the relationship between age and life satisfaction.

There was no significant difference between the variables of gender and life satisfaction in this study. In the literature, there are studies stating that life satisfaction differs significantly according to gender (Giusta et al., 2011; Al-Attiyah & Nasser, 2013; Yaremtchuk, 2014; Chang et al., 2017) and studies stating that life satisfaction does not differ significantly according to gender (Kirişoğlu, 2016). There may be some mediated variables that affect the relationship between gender and life satisfaction.

Findings were obtained based on metaphors within qualitative research on life satisfaction. Among the 62 different metaphors obtained, the metaphor of 'happiness' was used the most. When these metaphors were examined, four categories were received. The categories were accepted under life satisfaction as a necessity-positive situation, uncertainty, balance, and life satisfaction as a negative concept. During the categorization, the explanations of the metaphors were also taken into account. In this context, the quantitative finding, which emerged at a high level in the quantitative results of the participants and obtained in the variable of life satisfaction in general, is supported by prominent metaphors such as 'happiness', 'enjoying life', 'peace', which the participants explained. Since these metaphors were gathered under the title of life satisfaction as a necessity-positive situation, it was concluded that the qualitative and quantitative findings supported each other, the participants who were satisfied with their lives had positive metaphors and anecdotes, and their life satisfaction was high in this context.

Apart from these results, no metaphors were associated with the variables of age, gender, and mother and father's vital status. Regarding the relationship status variable, the metaphor of 'marriage' belonging to the category of life satisfaction as a necessity-positive situation was obtained. In these respects, there are differences in the results of the two studies. Considering the history of the research, it was desired to emphasize the differences in findings between it and current research since it was conducted at least twenty years ago. Likewise, Mellor et al. (2008) concluded in their study that individuals' belonging to emotional relationships increases their life satisfaction. In the study conducted by Kaplan and Erdem (2022), the fact that there was no significant difference between university students' life satisfaction and relationship status supports the findings of the relationship status variable obtained in the research.

Sixty-one of the metaphors obtained from the qualitative findings belong to life satisfaction as a necessity-positive situation. The quantitative results are directly related to the metaphors in this category, 7 metaphors belonging to the category of life satisfaction as uncertainty, 6 metaphors belonging to the category of life satisfaction as balance, life satisfaction as a negative concept 9 metaphors belonging to the satisfaction category were obtained, and these metaphors are not directly related to quantitative findings. When the unrelated metaphors are examined, the most striking metaphor is the metaphor of 'eat something' stated by two different participants. This metaphor has brought a different perspective to life satisfaction by being associated with balance and being healthy. Negatively, it was concluded that there are metaphors that are different from each other and incompatible with their characteristics in the category of life satisfaction.

The results obtained revealed that the research findings are in parallel with current studies in the literature. In addition, the studies are similar to each other because the studies were prepared using quantitative research methods. Concluding the quantitative findings of this study by supporting it with qualitative research data has created an important perspective.

In this study the mixed-methods research was employed, embodying both quantitative and qualitative designs. In this sense, the study results could be examined in more depth. The data was collected in 2021-2022 through face-to-face sessions conducted with the participants. The sample group and the variables covered in the study constitute the limitations of this study. Professionals working in the field can organize their studies to increase life satisfaction by using the results of this and similar studies. In future studies, some aspects of the regarding issue should be addressed. Relatedly, different variables (e.g. motivation, work performance, life purpose) should enter into the question, mediation analysis studies require close attention. It should be noted that the results of this study were gathered by deploying a case study design, and interactional results can further be obtained with focus group work.

For participants with moderate levels of life satisfaction, accessing to psychological support and counseling services are important. Using these results, some efforts should be made to emphasize the need for such services and facilitate access to them. The finding that receiving social support has a positive impact on life satisfaction indicated that individuals need to expand or strengthen their social support networks. In this context, it is important to increase awareness of social support resources in the community and enhance social support systems. Understanding the relationship between employment status and life satisfaction can lead to improvements in working conditions by employers and policymakers. Enhancing the emotional and physical well-being of employees in the workplace can increase their life satisfaction. Considering the positive impact of receiving social support on life satisfaction, creating and promoting social support programs are important. Such programs may include various approaches, such as psychological counseling, group therapy, or community activities. Conducting further research on the relationship between personal income and life satisfaction is important to evaluate the effectiveness of economic policies and social assistance programs. The effectiveness of support programs for individuals with low-income can be examined. In general, a better understanding of the variables related to life satisfaction and how these variables affect individuals' life satisfaction can provide guidance for the development of policies and programs aimed at increasing life satisfaction. Such programs can help individuals with life skills, psychological support, and emotional well-being. Understanding the relationship between education level and life satisfaction emphasizes the importance of access to education opportunities. Therefore, policies and programs can be developed to increase access to educational opportunities, especially for individuals living in low-income or disadvantaged areas. To strengthen the positive relationship between education level and life satisfaction, it is important to improve the quality of the education system. Qualified teachers, up-to-date curricula, and educational materials are essential for ensuring equal opportunities in education.

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"Not Joblessness but A Job I Dislike Scares Me": Exploring Employment Anxiety

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ABSTRACT

An important development task for university students is to complete their education and join the labour market. Therefore, understanding and exploring students' concerns about getting a job seems to be a noteworthy area in supporting their career development. The present study aims to explore the concerns of university students about employment. Semi-structured focus group interviews were conducted with 16 third- and fourth-year Turkish university students (8 females and 8 males) from various departments. The participants responded to questions such as what they thought about finding a job after graduation and how individual and contextual factors affected their concerns. The data were analyzed using thematic analysis in accordance with the Ecological Theory Framework and The Systems Theory Framework of career development. Consequently, employment anxiety appeared in the factors that were individual, close-circle, labor market, and systematic. Further, findings showed that participants also had concerns about underemployment as well as unemployment. In light of the findings, implications and recommendations regarding career counseling and career development were discussed.

"İşsizlikten Değil Sevmediğim Bir İşe Girmekten Korkuyorum": İstihdam Kaygısının Anlaşılması Üzerine Bir Araştırma

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İş arama kaygısı, Kariyer kaygısı, Kariyer danışmanlığı, Kariyer gelişimi, İstihdam kaygısı

Öz

Üniversite öğrencilerinin önemli bir gelişim görevi eğitimlerini tamamlayıp iş gücü piyasasına katılmalarıdır. Bu bağlamda, öğrencilerin iş bulmaya ilişkin endişelerinin anlaşılması, kariyer gelişimlerini desteklemede önemli görünmektedir. Bu çalışma, üniversite öğrencilerinin iş bulma ve istihdam edilme konusundaki endişelerini araştırmayı amaçlamaktadır. Katılımcılar üniversitelerin çeşitli bölümlerinde okuyan 3. ve 4. sınıf 16 üniversite öğrencisinden (8 kadın ve 8 erkek) oluşmaktadır. Katılımcılar ile yarı yapılandırılmış odak grup görüşmeleri yapılmıştır. Odak grup görüşmelerinde, katılımcıların mezun olduktan sonra iş bulma konusunda ne düşündükleri ve bireysel ile bağlamsal faktörlerin bu endişelerini nasıl etkilediği gibi sorular yer almıştır. Elde edilen veriler, Ekolojik Kuram ve Kariyer Gelişiminin Sistem Teorisi çerçevesinde tematik analiz kullanılarak analiz edilmiştir. Araştırma sonucunda, katılımcıların istihdam kaygısının bireysel, yakın çevresel, işgücü piyasasına ilişkin ve sistematik faktörler ile çerçevelendiği görülmüştür. Ayrıca, bulgular katılımcıların işsizliğin yanı sıra eksik istihdam konusunda da endişeleri olduğunu göstermiştir. Bulgular ışığında, kariyer danışmanlığı ve kariyer gelişimine ilişkin çıkarımlar ve öneriler sunulmuştur.

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INTRODUCTION

Every young person faces a serious task, which is to find a suitable job and start working. During this stage, some university students struggle to find employment after completing their education (Shin, 2019; Yasar & Turgut, 2020; Yi & McMurtrey, 2013). In the 21st century's unstable, uncertain, and dynamic labor market, finding a suitable job becomes more critical for youth with the increasing competition. University seniors and recent graduates have to cope with the stress and pressure of employment. Employment-related stress can be an obstacle to young people's career development and well-being. Recent studies indicated that employment or job-seeking anxiety was related negatively to variables such as career decision-making (Zhou, 2021), life satisfaction (Shin, 2018), and self-confidence (Chen & Zeng, 2021), but it was related positively to variables such as internet addiction (Jang & Kyoung, 2013). Therefore, examining the employment concerns of young people may be important for their career development, especially in economically challenging conditions.

The COVID-19 Pandemic began with increasing unemployment rates and ended with the threat of underemployment. Although there are worldwide improvements in unemployment rates after the pandemic (OECD, 2021b), new problems for young people have begun to appear. OECD (2021a) points out that underemployment has become a threat in the new century. Underemployment refers to working in jobs that are below an employee's skills, or with low-paid jobs or fewer hours (Friedland and Price, 2003). Therefore, young people may face issues not only of being jobless but also of finding unsuitable jobs. In this regard, there is a need for a more comprehensive redefinition of youth employment anxiety.

Research on employment anxiety is mostly examined with concerns about unemployment. Some studies defined employment anxiety by state anxiety symptoms (Belle et al., 2021; Shin, 2018). However, measures of state anxiety often exclude the personal meaning of anxiety or stress and coping mechanisms, although the process of stress includes triggers and causes (Lazarus, 1990). Embracing an approach that encompasses complex systems may be beneficial to understanding employment anxiety. Some previous studies attempted this direction and defined employment anxiety with contributing factors such as the economic conditions, the pressures of their relatives, and their individual characteristics (Eş & Durak, 2018; Demir, 2016; Lim et al., 2018; Tekin-Tayfun & Korkmaz, 2016). Although these studies included systemic factors, they did not mention systemic approaches.

Theory-based anxiety explanations can avoid ignoring important aspects of employment anxiety and can guide researchers (Lazarus, 1990). As a result, a systems approach to career development may aid in comprehending these challenges. This study adopted the Systems Theory Framework and Ecological Systems Framework to explore employment anxiety.

The Systems Theory Framework of Career Development

The systems theory framework is a meta-theoretical framework that explains career development in interrelating systems (Patton & McMahon, 2015). This approach is based on a systematic origin that considers the whole with its parts (McMahon & Patton, 2018; Patton & McMahon, 1999). Accordingly, career development comprises the individual system, social system and environmental-societal system. The individual system includes personal features such as gender, age, personality, interests, and values. The social system includes social environments such as family, workplaces, and the labor market that surround individuals. Finally, the environmental-societal system embraces macro-level factors that are socioeconomic, cultural, and geographical. McMahon and Patton (2018) suggest that working forms its own systems. Therefore, they underline that career counseling practices involve promoting research in the environment as well as self-awareness. Accordingly, we can argue that career counseling is actually a systemic intervention.

Ecological Systems Framework

Bronfenbrenner (1977) described human nature as an ecological system that includes different systems, both individual and environmental, simultaneously, and together throughout human life. These systems, such as the micro, meso, and exosystems, change, develop, and interact with one another over time, reflecting the human being's dynamic nature. Several studies in career development have used and benefited from ecological systems theory to better understand the complex processes of career development (e.g., Sun & Jang, 2021; Tao & Jiang, 2021). Ecological theory also contributed to a study to suggest that the problem of neither in education nor in employment (NEET) appears to be part of the integration of complex systems rather than being merely an individual issue (Lőrinc et al., 2020). Similarly, we consider that employment anxiety is to be more than an individual problem. In this regard, the exploration of the content of the systems comprising employment anxiety may contribute to the understanding of this issue. Moreover, taking a systems perspective provides to develop interventions for each system (Williams, 2016).

According to The Systems Theory Framework and Ecological Theory, employment anxiety may consist of the interaction of factors that are individual, close-circles, and society and the world. Although there is limited research on employment anxiety from a systematic perspective, components revealed in these studies can be categorized in line with the theory. In this regard, the micro level of employment anxiety may be related to skills and interests reported in previous studies, while the expectations of family and friends may compose the mesosystem (Eş & Durak, 2018; Demir, 2016; Lim vd., 2018; Pisarik et al., 2017; Tekin-Tayfun & Korkmaz, 2016). At the macro level education and business policies and economic conditions may impact employment anxiety. The COVID-19 pandemic and its effects on education and the labor market can be evaluated in this context.

The Present Study

Employment anxiety is examined narrowly in the literature, but it will appear more and more in the changing world. Further, the employment anxiety context needs to be expanded due to the current conditions. Since finding a job can be complicated due to the individual, environmental, and interdependent factors, employment anxiety may have a complex structure rather than be a single issue. Therefore, systematic perspectives can help to understand this problem and contribute to our current knowledge. Furthermore, career practitioners and professionals may benefit from this perspective in developing employability and employment interventions. We hope that more research focusing on youth employment concerns may support young people, career practitioners, and also the literature, especially in the post-pandemic new world. Therefore, we aim to explore the concerns of university students about finding a job by using a qualitative model.

Context

Turkey is among the countries, such as Japan, China, and South Korea, that apply for national exams to enter public and private universities. In 2022, approximately 3 million students took the university entrance exam, but only a third were acknowledged (OSYM, 2022). The number of students taking exams has increased every year. The process of entering university is quite challenging and stressful for many Turkish youth due to the increasing competition. On the other hand, the employment rates of university graduates have also decreased. Unemployment rates among Turkish university graduates are higher than the OECD average (OECD, 2022b). As of 2021, 29.7% of Turkish graduates were reported to be NEET (TURKSTAT, 2022). However, higher education policies in Turkey promote university graduation. The goal of "one university for every city" has been implemented since the 1980s, and this policy may lead to a form of youth unemployment called "academic inflation" (Yalçıntaş & Akkaya, 2019). While the number of university graduates are growing, job opportunities are not, making it difficult to find a job. This is especially experienced in the public sector. Many university students in Turkey choose to find a position in the public sector as it provides better conditions and job security (Bardakçı et al., 2020; Mutlu et al., 2019). Turkey is also a country that applies nationwide exams for recruitment to the public sector. The interest in the public sector increases the recruitment scores. Thus, university students begin to prepare for a new exam before they get a degree.

Young people in Turkey have faced serious competition both while entering university and after graduation. Moreover, they have limited opportunities to receive career support during higher education. However, there are efforts to increase accessibility to career services. In this regard, the Presidency of the Republic of Turkey Human Resources Office recently proposed the inclusion of a career planning course in all programs of the higher education curricula to develop the career competencies of the students. Despite these efforts, the development of career services in higher education is still preliminary in Turkey.

METHOD

The present study aims to explore university students' concerns related to their future employment status. Therefore, this study follows the qualitative research methodologies. Qualitative research has an exploratory, developing, and receptive nature rather than beginning with predetermined hypotheses (Creswell, 2015). Since this study aims to improve the existing literature on employment anxiety, qualitative research would help understand the concept's structure.

Participants

The participants of this study consist of undergraduate students in the 3rd and 4th grades from different faculties. We excluded 1st and 2nd-grade students because of career interest and awareness expected to increase with graduation. After the university entrance exam, 1st and 2nd-grade students may focus on relieving stress and adapting to university life. We used one of the purposive sampling methods, maximum variation sampling, to select the participants. The goal of the maximum variation method is to make the participants vary each other in terms of certain characteristics. Thus, it provides a means to present different perspectives on the related case (Patton, 2001). Hereby, we reached 16 undergraduate students (8 female and 8 male) from various faculties in universities in Turkey's two big cities. One of these two universities was established recently, while the other is well-known. Table 1 shows the gender and department information of the participants.

Table 1

Gender and departments of the participants

Focus Group	Participant	Gender	Department
Focus Group 1	MA	Male	Political Science and Public Administration
	MB	Male	Psychological Counseling and Guidance
	MC	Male	Mathematics
	MD	Male	Mathematics
	ME	Male	Political Science and Public Administration
	FA	Female	Mathematics
	FB	Female	Economy
	FC	Female	Economy
	FD	Female	Economy
	FE	Female	Mechanical Engineering
	FF	Female	Healthcare Management
Focus Group 2	MF	Male	Political Science and Public Administration
	MG	Male	Political Science and Public Administration
	MH	Male	Electrical and Electronics Engineering
	FG	Female	International Trade and Logistics
	FH	Female	Theology

Researchers

The researchers are academicians working in the field of career counseling. One of the researchers serves as a professor in the Department of Guidance and Psychological Counseling. Furthermore, he has also published non-academic publications on education and employment politics in Turkey. Another of the researchers is a PhD candidate in the same department and works as a research assistant. She is familiar with employment anxiety as she started her job recently and about two years after graduation. Therefore, she received supervision from other researchers so that her own experiences were not reflected in the current study. Finally, the last researcher has a job in the university's career center as a career counselor, so he actively deals with the career concerns of students. He is also a PhD candidate in the same department. We negotiated and assessed ourselves jointly to minimize the influence of personal and professional experiences on the study. Furthermore, we believe that the guidance of a theory rooted in strong foundations to interpret the findings might also help reduce possible biases.

Procedure

The ethics committee approved that this study is in accordance with ethical standards (Selcuk University, Faculty of Education Ethics Committee: 22.08.2022-E.343875). Then, we announced the present study to recruit volunteer students through the faculty members and the university career center. The volunteers contacted us via telephone and e-mail, and together we determined the date of the meeting. One of the researchers carried out focus group interviews, the first being face-to-face and the second conducted using an online interview application. We ensured that the online interview application is a reliable and frequently used tool in the field. In the spring of 2022, focus group discussions occurred. Participants replied to a total of seven questions in the focus group interviews. We prepared the questions using a systemic view. Accordingly, the questions included personal, environmental, and global employment concerns. The questions started with the participants introducing themselves and concluded with a request for any additional comments. As for the main issue, five questions were asked, for example, "*What do you think about finding a job after graduation*?" and "*What do you think are the things in your family and social life that make you more worried about finding a job*?". Each focus group interview lasted approximately one hour. During the focus group interviews, only audio was recorded; no video was captured. The interviewer then transcribed the audio and shared it with other researchers immediately. The transcripts are anonymized to ensure the privacy of the participants.

Data analysis

A researcher coded the data obtained from the face-to-face and online focus group interviews by using MAXQDA Pro 22.2 qualitative data analysis software. Other researchers reviewed and discussed all codes. As a result, all researchers agreed on the codes and themes. During the data analysis, thematic analysis stages were followed (Braun & Clarke, 2006). Firstly, the researcher carefully read the transcripts, again and again. Then, the codes were generated, the themes that were relevant to the codes were uncovered and analyzed, the themes were labeled, and the findings were summarized. The Systems Theory Framework of career development (McMahon & Patton, 2018; Patton, & McMahon, 1999) and Ecological Theory Framework (Bronfenbrenner, 1977) guided the process of theme formation. Consequently, the codes and themes were visualized as diagrams (Figure 1).

Trustworthiness

Similar to quantitative research, qualitative research provides evidence of its credibility in a variety of ways (Creswell & Miller, 2000). Thus, we used more than one method to ensure validity and reliability of the present study. The researchers became aware that their personal experiences could introduce bias into the study. We constantly reviewed, discussed, and reported these experiences during the study. After collecting the data, 13 out of 16 participants approved the accuracy of their expressions. The findings were detailed and accompanied by numerous quotations. Obtaining the opinions of the readers or reviewers was also one of the methods adopted to verify the validity of this research (Creswell, 2015; Creswell & Miller, 2000). Therefore, we presented this study at a national conference. This national conference is for psychological counselors from various specialities. Accordingly, we received opinions from psychological counselors working in the field and academia.

RESULTS

Focus group interviews revealed that in the initial phase of their careers, a noteworthy proportion of participants intended to work in the public sector. This was especially observed in the participants who experienced indecision. Figure 1 presents the codes and themes within the framework of ecological theory. Accordingly, employment anxiety emerged with individual, close-circle, labor market, and systematic factors.

Individual factors

The theme of individual factors consisted of codes that were skill deficiency, unsatisfactory education, person-job mismatch, low career awareness, and lack of social capital. In this regard, some participants had concerns related to their own competencies. These participants stated that they were worried about their lack of knowledge and skills that would benefit them in finding a good job. For example, FG, a female student in International Trade and Logistics, stated that her foreign language skills were not sufficient. FG says: "*This is my biggest disadvantage because my competitors are world-class. They speak two languages and even three languages*." Further, FE, a female student in Mechanical Engineering, doubted her own leadership and communication skills. FE stated, "*I will be a manager someday, and I am afraid of being not capable of managing people*." It is noteworthy that the skills expressed by the participants are soft skills rather than field knowledge.

According to the participants, they require skills not only to get but also to keep a job. MD, a male student in Mathematics, expressed this as follows: "*Because I am thinking about the private sector... As long as you cannot improve yourself, it doesn't matter if you go to organization X or organization Y, you cannot* *hold on*." On the other hand, skill development can also serve as a reason for hope. A belief that any individual can find a job if he/she develops himself/herself, may give the feeling of career control. MC, the male student in Mathematics, said: "*As long as we improve ourselves, there is no such thing as being unemployed. As long as we improve ourselves, we can find a job anywhere*."

Similar to skill deficiency, unsatisfactory education contributed to employment anxiety. Some participants were worried about courses at university concerning being more theoretical than practical. They believed this could be a problem in the labor market, which expects their employee candidates to have experience. FF, a female student in Health Management, stated that she was not satisfied with her internship due to the conditions of the pandemic and also within the course. FF said as follows: " *I did an internship, but it was not a good one. We cannot say it was very productive because it was an applied course and there was a pandemic*." FF stated her search for experience: "*That's why I always wanted to do internships voluntarily*." FC, a female student in Economics, agreed with and expressed her concern as follows:

"We do not get enough practical training in our education. It would be better if there was more practice. For example, I could not be appointed to the public sector, and I want to work in the private sector. But I do not have enough information about this job. So, I will waste my time getting that information. It would be much better if I took this at school. "

Person-job mismatch also served as a trigger for employment anxiety. Some participants stated that they did not freely choose their department. In this regard, family demands or financial concerns had an impact on their career choice. FB, a female student in economics, expressed: "*My department that I did not choose willingly. … My department is very complex. I wanted to be a teacher. … But I still think the same way. [For this purpose] Working for paid or free makes no difference.* " FB pointed out that she wants to work at a job she really wants in the future, regardless of her department. FB was not the only person desiring a career other than his/her major. MG, a male student in Political Science and Public Administration, explained his experience as follows: "*I wanted to study physics. Like I said, there was some family pressure. Frankly, I do not want to build my career through my major. If necessary, I can retake the exam and study for a new department.* "

When discordance with the department and inadequacies in career planning skills are combined, uncertainty and lack of control may arise. A participant indicated that he got improper guidance during department choice and, therefore, he had difficulty in making plans. In this situation, he could only see his most familiar and straightforward option. In this regard, MB, a male student in Guidance and Psychological Counseling, expressed his feelings of uncertainty as follows:

"… I still do not understand how I got to this department and how I am in the fourth grade. I still do not understand what this department is. I cannot see my way. I believe the public sector is the shortest path... I do not think I have the chance to choose a job right now. "

Finally, thoughts of not having enough social networks can involve employment anxiety and also regret. FG, who believes that social networks can increase job opportunities, especially in the private sector, expressed her anxiety because she believed that she had missed an important opportunity. She explained as follows: "*Our student community is very active. If I had been there since freshman year, I might have known a lot of businesspeople. I feel so alone about this. … Because my friends who did this started getting job offers*."

Close-circle factors

The participants explained how their family and friends impact their anxiety about finding a job. Accordingly, family expectations, jobless friends, and social media codes emerged. Parents' aspirations for their children to have good jobs can be challenging for students in some respects. FA, a female Mathematics student, remarked that she had an underlying concern even though she did not see any obvious pressure from her family to obtain a job. FA said:

“There is a status that your families and social circle see in you. They say you can do this, you can achieve that status. But you know, you may not feel ready ... or you come across option A or option B. I am afraid of making that mistake, I am afraid of not reaching that status.”

Similarly, FH, a female student in Theology, expressed that she was afraid of disappointing her family as follows:

"I think I would be in a sticky situation … You know, they look at you with the belief that you will climb the ladder because you go to university. When I say something to the contrary... Of course, their upset means that I am also upset. "

There was concern about how family and other relatives would react, in the case of being jobless. In addition, FH also worried that they would compare her to peers. FH said:

"If I am not being appointed... We are all the same age; we are in the same department. It would be a curious coincidence... If they were appointed but I was not appointed, people's attitudes toward me would definitely change. I would feel down."

MA, a male student in Political Science and Public Administration stated that his family did not interfere with him. Therefore, he does not feel any positive or negative influence from his family. On the contrary, MH, a male student in Electrical and Electronics Engineering, constantly feels the pressure to get a job and earn money not only from his family but also from his relatives and close circle. MH said this about the difference between his own values and goals and those of his family:

"There is always pressure from family. This is my second university. Because you are older, when you visit your relatives, it looks like this. They say, 'Are you still in university?' or 'What are you going to do with so much training?' In fact, they view going to university as money-making. However, I want to be a good engineer for my country."

FE said she experiences family or close-circle pressure differently. FE expressed it as follows: "*They usually look at mechanical engineering as a male job. Whether it's my family or my social circle, they think I will not have a promising future because I am a girl.* " In this way, students had to deal with gender-based prejudices in getting jobs.

Another worrisome case was being a witness to peers or graduates who could not find a job because it set off thoughts that they would not find jobs like their friends. This may reduce students' hopes for the future. FG explained it as follows: "*Graduates do not work in very good jobs. That's why we feel this way*". MF, a male student in Political Science and Public Administration, agreed and pointed out how upper grades' concerns are transferred to them as follows:

"All seniors feel the same ... We all have the feeling before we get our diploma that we will not be able to find a job. Because we see what happened to those before us and then this is somehow passed on to us.".

Today's youth spend most of their time on social media. Therefore, social media is now involved in their close circle. At this point, MG gave an example of how social media triggers their employment anxiety. MG said:

"We all use social media. We come across some news there. It is like a doctor [physician] quitting his job and setting up a shop abroad. And then you say to yourself, if a doctor also does this, what will I do? You despair about this. "

Labor market factors

The codes, which were 'university reputation', 'too many graduates', 'unlike job worries', and 'experience expectations' formed concerns about the labor market. In this regard, one of the issues expressed by the participants was the increase in the number of graduates. The ongoing development of new universities and increasing quotas have exacerbated this worry. Despite the high number of graduates, the limited demand for a labor force can lead to excessive competition. FF stated her concern and anger about higher education politics with the following words, "*This is what I am most concerned about. There are so many universities now. I worry that there are so many unnecessary university graduates. They also removed the barrage [university admissions criteria over a particular score]. Now anyone can enter the university.* " MA agreed and added, "*They are studying to be unemployed*." Moreover, FH, who intends to work in the public sector, expressed her despair regarding more graduates as follows: "*Scores increase every year. Your competitors are also increasing. The number of people preparing to take the exam has increased. No matter how hard you try, sometimes that is not enough.* " Public sector recruitment in Turkey is based on an examination process. More graduates entering exams means an increase in exam scores. Therefore, students begin to prepare for the exam rather than focusing on their courses, due to employment anxiety when they become seniors.

Another concern was being able to work in a desired job or suitable conditions. Several participants specified that they were worried about working in low-paid, challenging conditions and outside of their profession. "*I do not think I would sweat finding a job. I think I would be able to find the job I desire,*" FG stated clearly. This feeling was challenging because they considered they would experience financial issues and job unsatisfactory despite all efforts to complete higher education. Their plans and hopes may result in disappointment. MH expressed his anxiety about this as follows:

"I am worried about not working in a job I want. … I want to think and produce. That is what I want

to do. My concern is being unable to find this kind of job and being compelled to do an ordinary engineering job.”.

Regarding the matter of getting a job in the private sector, inadequate experience was one of the obstacles to finding a job according to participants. Moreover, employers’ expectations of experience led some participants tolimit their options and be steered towards the public sector. MG explained:

"I am no different than a high school graduate in the private sector. The only way for me is to work in the public sector because of my department. In other words, I can only work either in the Ministry of Interior Affairs or in the Ministry of Foreign Affairs. I have no choice...”

MA, on the other hand, believed that university reputation would be important in their employment. In this sense, unless they obtain a degree from a prestigious university, the only option is to be appointed to the public sector instead of the private sector. MA put it this way: "*It doesn't matter if you graduated from [University Name] or [University Name] as long as you are not in a [Prestigious University Names]. In the public sector, they don't look at your graduation*". However, some participants believed that with enough effort, they could find good jobs in the private sector regardless of which university they attended.

Systematic factors

The current conditions in the world and the country, as well as cultural factors, are defined as systemic factors. The codes consisted of nepotism, discrimination, and uncertainty in this theme. Participants believed that nepotism is common, especially in the public sector. "Those with a friend at court will get jobs, those without friends will be left out." FF said in short. MG agreed and added how nepotism and lack of experience limited his alternatives as follows:

"Actually, we have a lot of job opportunities both in the private and public sectors. But in the private sector, they want experience, and I don't have that. In the public sector, they want friends in high places, and I do not have that either. That's why I think I am going to have difficulty. "

Some female participants were worried about gender or religious discrimination in recruitment. Women in "men's" jobs like engineering suspect they will face challenges during their internship or employment. FG expressed her feelings as follows: "*It can be challenging to work as a woman when it comes to logistics, ports, and customs. Working as a woman in such enterprises can be difficult, and also being hired in such enterprises can be difficult*." FD, a female economics student, added that she was concerned about being discriminated against due to her religion and lifestyle. FD explained her case as follows: "*If I apply for a job in the private sector, for example, to banks, I might not be preferred because of my hijab*."

Another issue raised by participants was uncertainty. Some participants stated how hard it is to predict the future of their careers due to unstable political and economic conditions. Policies could change in a short time, and the pandemic showed that economies can easily break down. This uncertainty seemed to be the only concern of MC. He said:

"There is something long-discussed. They say the end of the private sectoris near, and everyone will go into the public sector. They still say it even though it does not happen. Only that worries me. What will we do if the private sector is at an end?"

Similarly, MF was concerned about economic and political changes in the country. He described it as follows, “*There are some economic problems in the country. I am worried about the possibility that the economic problems would affect our purchasing power or budget for a job in the future or that humanitarian or legal difficulties would be experienced*.”

Finally, codes and themes were related to each other. As suggested in the ecological theory, there was an interaction between layers. For example, participants who did not gain enough experience at university worried that they would not meet the expectation of experience in the private sector when they entered the workforce. It led them to turn to the public sector, in other words, to limit their options. Similarly, the pressure of finding a job from close circle may increase the possibility that participants will work in low-paid and challenging conditions, namely undesired jobs, to find a job as soon as possible. In summary, individual, environmental, and systemic factors can be suggested to be intertwined as in the ecological theory (Bronfenbrenner, 1977) and Systems Theory Framework of career development (McMahon & Patton, 2018; Patton, & McMahon, 1999). Figure 1 shows the code model formed from the systematic perspectives.

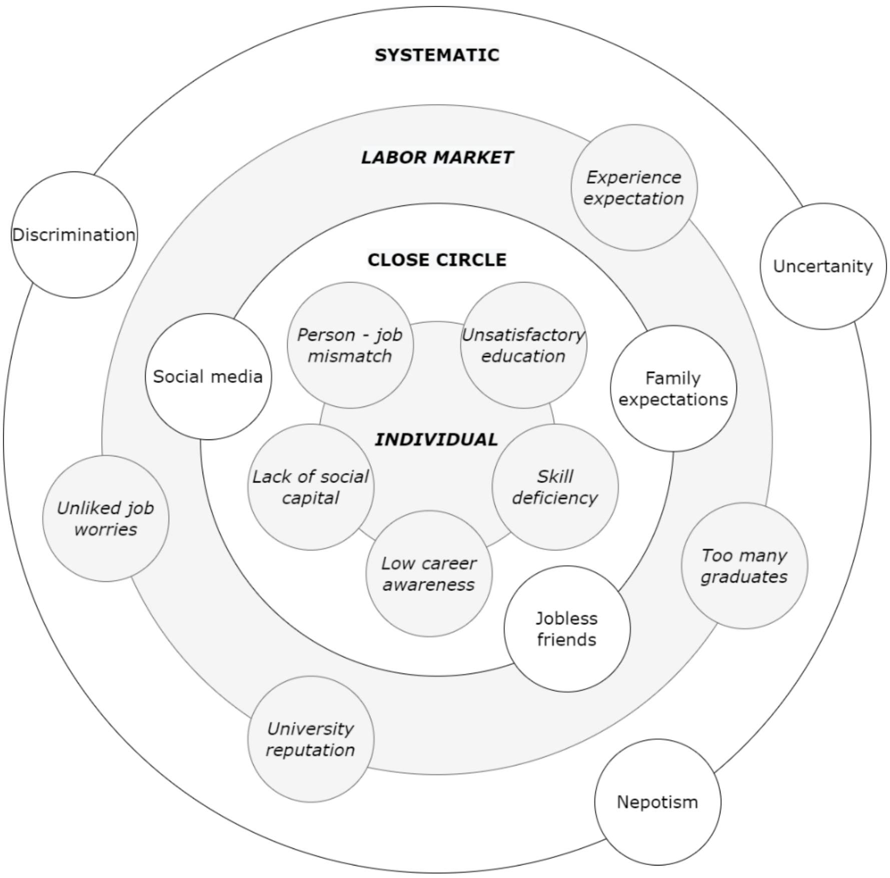

Figure 1. *Code model of the present study*

DISCUSSION, CONCLUSION, RECOMMENDATIONS

The present study outlines employment anxiety into three themes in line with the ecological theory. The first theme, individual factors, mostly consisted of the perceptions of knowledge, skills, and university education. Previous studies reported that inadequacy in work-related skills was involved in jobless anxiety (Eş & Durak, 2018; Demir, 2016; Lim et al., 2018; Pisarik et al., 2017; Tekin-Tayfun & Korkmaz, 2016). On the other hand, the current study also expands the findings regarding individual factors. Concerns about 21st-century skills such as entrepreneurship and social networking were noteworthy in terms of their expression by the participants. Today, the labor market demands these skills because they can be used by transferring to many jobs (Rotherham & Willingham, 2010). Therefore, skill deficiencies and associated employment anxiety relate not only to technical skills or knowledge but also to transferrable skills, namely soft skills. Another contribution to the definition may be that dissatisfaction with education is involved in employment anxiety.

In the study, some participants were dissatisfied with their university education. As one participant stated, this dissatisfaction may have started with the COVID-19 pandemic. During the COVID-19 pandemic, educational institutes suddenly and unpreparedly transferred to the online world, and the quality of education was controversial. Some research suggests that distance education does not provide sufficient quality compared to face-to-face (Prestiadi et al., 2020; Robson and Mills, 2022). The decrease in the quality of education possibly affects the readiness of young people for the labor market. Accordingly, there can be a risk for young people getting more education in the future that they may not be able to work in higher-level jobs due to the quality of their education.

Findings show that people in a close circle can set off employment anxiety. Furthermore, social media was also included in this circle. In line with this, previous research defined employment anxiety as including concerns arising from interactions with family and friends (Demir, 2016; Eş & Durak, 2018; Lim et al., 2018; Tekin-Tayfun & Korkmaz, 2016). A study reported that social comparisons may feed career anxiety (Pisarik et al., 2017). In the present study, participants compared themselves with their peers. In addition, participants also expressed their concern about being compared to others in family and relative circles. Individualism and collectivism coexist in Turkey's society. Therefore, people face social comparison inside themselves and outside, such as with family and relatives. Turkish students were worried because they were comparing themselves with others as well as being compared with their friends by relatives.

In research on employment anxiety, family impact was an economic concern (Demir, 2016; Eş & Durak, 2018; Lim et al., 2018; Tekin-Tayfun & Korkmaz, 2016). For instance, financial support from the family when unemployed was a source of anxiety. Participants simply did not want to burden their families. In this study, stigmatization and failing expectations, rather than economic conditions, were the focal points of the concerns from family members. This may be a limitation due to the sample characteristics of our study. However, disappointing the family can be as stressful as financial hardship. Therefore, this finding may expand the literature. Another noteworthy finding is that social media posts may also function as a close circle regarding employment anxiety. More research is needed into the relationship between social media and employment anxiety.

Regarding the findings on the labor market, participants expressed concern about underemployment, as expected. However, research regarding job seeking, employment or career anxiety deals with this issue limitedly. Eş and Durak (2018) mentioned underemployment narrowly in the despair dimension of job-seeking anxiety. Considering the concerns about it (OECD, 2021a), underemployment can be a part of employment anxiety.

Growing number of graduates, excess competition, and experience expectations were also included in job-seeking anxiety in other studies in line with the present study (Demir, 2016; Eş & Durak, 2018; Tekin-Tayfun & Korkmaz, 2016). Demand for higher education has increased not only in Turkey but also around the world (OECD, 2022a). Therefore, graduation from higher education has begun to be common in societies. Yi and McMurtrey (2013) discussed the potential implications of more and more people attaining a higher education degree. In this regard, employers may be challenged to find employees for low-skill jobs. On the other hand, there may be an overabundance of applicants for high-skilled positions requiring a university degree. The number of educated graduates working in high school jobs may also rise (Yi & McMurtrey, 2013). Thus, there are concerns about underemployment for the future rather than unemployment. The OECD's (2021b) cautions make sense in light of the findings.

Systematic barriers such as nepotism and discrimination are stressful events that individuals can hardly control. Accordingly, the findings support the hypothesis that the possibility of discrimination made the participants hopeless. Demir (2016) defined job-seeking anxiety with the dimension of discrimination. Yaşar and Turgut (2020) reported that the concerns about discrimination in employment were not different according to gender. However, the participants in their study were less concerned about discrimination than other factors. Gender discrimination is especially evident in women's jobs for men and men's jobs for women. Discrimination cannot, however, occur solely based on gender. According to the findings, participants had concerns about being discriminated against for their religious views. Discrimination can be based on gender, religion, sexual orientation, or any other difference. Therefore, employment anxiety can be inferred to include any form of discrimination.

In the present study, the career goal of some participants was to be appointed to the public sector, at least in the early stage of their careers, whereas for others, this was the only purpose. Previous studies supported participants' interest in the public (Bardakçı et al., 2020; Mutlu et al., 2019). Because of working conditions in the private sector and job security in the public sector, young people's purposes may be reasonable. Further, working in the public sector seems to provide young people with the time and money to pursue their aspirations, such as starting their own business and studying in the department they choose. Especially for those who cannot make decisions, the public sector can be favorable.

Limitations and Future Research Directions

The sample and focus group interviews have limitations. Focus group interviews provide richer data because of interactions within the group, whereas individual interviews can give in-depth data. Thus, if we conducted individual interviews, we would gain more in-depth knowledge from the experiences of the participants. Another limitation is the sampling of only two cities in terms of accessibility. In addition, some departments, such as medicine and fine arts, could not be represented, although we tried to reach the maximum diversity. Finally, conducting a focus group online resulted in the loss of participants. In addition, we were concerned that the interaction in online focus group interviews was more limited than in face-to-face interviews. In this case, we recommend that researchers take precautions regarding the loss of participants and interaction in online focus group interviews.

The present study aimed to explore employment anxiety. As a result, we concluded that employment anxiety includes concern about not only joblessness but also underemployment. Therefore, we recommend that future research should focus on youth employment concerns and review existing definitions. There is limited research on these concerns. However, increased concerns about underemployment indicate that more research is needed. We recommend supporting and expanding our findings with quantitative and qualitative research.

Implications for Practice

This research may have some implications. In this regard, the need for career counseling at the university level appears clear. The university career centers should provide more training and consultancy services to students, especially about the business world of the new century. Career counseling and education should focus on factors in every layer of the ecological model. For example, career services aim to increase career concern at the individual level, whereas they aim to increase career control at the systematic level. In addition, as Patton and McMahon (2015) suggest, this systemic perspective can be used in career counseling and career education practices related to employment anxiety. Students may benefit from the exploration, which increases their awareness of systematic factors affecting their employment concerns. Further, considering the concerns about more graduates, we suggest cooperation among policymakers, university administrations, and employers to produce common solutions and policies. Relations between the university and the labor market need to be strengthened.

CONCLUSION

In the present study, employment anxiety was elaborated with the Ecological Theory. Individual, close-circle, and systemic aspects claimed that employment anxiety emerged with interactions in complex systems. However, these findings cannot be claimed to generalize over the population because of the qualitative paradigm. On the other hand, we hope that this research provides a perspective for future research and draws attention to this important issue. There is limited study to examine students' employment concerns. Investigation into the concerns such as skill deficiency, under-education, undesired job, working low paid and challenging conditions is suggested within the scope of the anxiety of finding a job in future studies. In addition, we consider that ecological theory is suitable to explain employment anxiety. Therefore, we suggest studying how the intervention in different systems affects other systems and employment anxiety.

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The Roles of Internet Addiction and Cyberbullying Sensitivity for Prediction of University Students' Psychological Inflexibility*

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ABSTRACT

In this research, it is aimed to examine the role of internet addiction and cyberbullying sensitivity on the psychological inflexibility of university students. The study group was formed with university students studying in the state and selected by the random cluster sampling method. The relational screening model was used in the research. 561 university students, including 473 girls and 88 boys, participated in the research. Acceptance and Action Form-2, Young Internet Addiction Short Form, Cyber Bullying Sensitivity Scale, and Personal Information Form were used to collect the data for the research. Independent samples t-test, one-way analysis of variance Pearson Product Moments Correlation Technique, and multiple linear regression analysis were used in the research. As a result, the average psychological inflexibility scores of students with a low perceived family income level were found to be significantly higher than those of students with a moderate perceived family income. It was found that the psychological inflexibility score averages of the group whose purpose of using the Internet is to shop were higher than the psychological inflexibility score averages of the group using the Internet for information purposes. As the daily usage of social media increases, the average psychological inflexibility score increases. There is a significant positive relationship between Internet addiction and psychological inflexibility. There is a significant positive relationship between sensitivity and psychological inflexibility related to cyberbullying. According to the research findings, it has been found that the sensitivity related to internet addiction and cyberbullying is a predictor of psychological inflexibility scores.

Üniversite Öğrencilerinin Psikolojik Esnekliklerinin Yordanmasında İnternet Bağımlılığı ve Siber Zorbalık Duyarlılığının Rolü

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ÖZ

Bu araştırmada üniversite öğrencilerinin psikolojik esneklik, internet bağımlılığı ve siber zorbalığa ilişkin duyarlılık düzeylerinin rolünün incelenmesi amaçlanmaktadır. Çalışma grubu, devlet üniversitesinde öğrenim gören ve tesadüfi küme örnekleme yöntemiyle seçilen üniversite öğrencilerinden oluşturulmuştur. İlişkisel tarama modeli kullanılmıştır. Araştırmaya 473'ü kız, 88'i erkek olmak üzere 561 üniversite öğrencisi katılmıştır. Verilerin toplanmasında Kabul ve Eylem Formu-2, Genç İnternet Bağımlılığı Kısa Formu, Siber Zorbalık Duyarlılık Ölçeği ve Kişisel Bilgi Formu kullanılmıştır. Araştırmada bağımsız örnekler t-testi, tek yönlü varyans analizi, Pearson Momentler Çarpımı Korelasyon Tekniği ve çoklu doğrusal regresyon analizi kullanılmıştır. Bulgulara göre, algılanan aile geliri düzeyi düşük olan öğrencilerin ortalama psikolojik esneklik puanlarının, algılanan aile geliri orta düzeyde olan öğrencilere göre anlamlı düzeyde yüksek olduğu bulunmuştur. İnterneti kullanma amacı alışveriş yapmak olanların psikolojik esneklik puan ortalamalarının, interneti bilgi amaçlı kullanan grubun psikolojik esneklik puan ortalamalarından daha yüksek olduğu tespit edilmiştir. Sosyal medyanın günlük kullanım süresi arttıkça ortalama psikolojik esneklik puanı da artmaktadır. İnternet bağımlılığı ile psikolojik esneklik arasında pozitif yönde anlamlı bir ilişki vardır. Siber zorbalığa ilişkin duyarlılık ile psikolojik esneklik arasında pozitif yönde anlamlı bir ilişki vardır. İnternet bağımlılığı ve siber zorbalığa ilişkin duyarlılığın psikolojik esnekliği yordadığı tespit edilmiştir.

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INTRODUCTION

It is important to be able to maintain psychological health in the face of experiences that cause negative emotions. Experiences such as a serious illness, abuse, or the loss of a relative can be given as examples of these experiences (Doğru, 2019). Being flexible contributes to a person's mental health by supporting the individual's adaptation level (Bond et al., 2006; Çolak, 2014). The concept of psychological flexibility includes six basic dimensions: acceptance, cognitive dissociation, being in the moment, contextual self, values, and value-oriented actions (Hayes et al., 2006). According to Hayes et al. (2006), the experience of life of non-functional efforts instead of attempting to change through to be able to adopt an attitude of accepting life “accept” in size; in order to be more functional thoughts, re-editing “cognitive dissociation” defines the size of. Being able to experience experiences in the present moment without focusing on the future or the past expresses the dimension of “being in the moment” (Twohig, 2012). The ability to maintain self-perception while experiencing experiences meets the dimension of “contextual self” (Grégoire et al., 2018). The “values” dimension means determining the values that will give meaning to a person's life and increasing his awareness about his values (Ercengiz, 2017). When a person can adapt the values, he adopts to his actions and behaviors, he provides “dedicated activism” (Sewart et al., 2019).

The inability to achieve psychological flexibility causes psychological inflexibility (Kashdan and Rottenberg, 2010). The inability to change one's behavior functionally in line with the changes that occur in one's life is defined as psychological inflexibility (Gilbert et al., 2018). Due to an inability to achieve psychological flexibility, the process of hardening from a psychological point of view leads to a worsening of the situation encountered (Levin et al., 2014). Achieving psychological flexibility involves adapting to fluctuating situations and being determined to stay adapted (Kashdan & Rottenberg, 2010). In the literature, instead of focusing on changing psychological events, acceptance and commitment therapy emerges as a theory that deals with the psychological reactions, acceptance, and determination of the person to these situations. Acceptance and Commitment Therapy is a cognitive behavior therapy approach that focuses on the process of increasing psychological flexibility (Levin et al., 2013). According to Acceptance and Commitment Therapy, the six interrelated dimensions that cause psychological inflexibility are shown as follows:

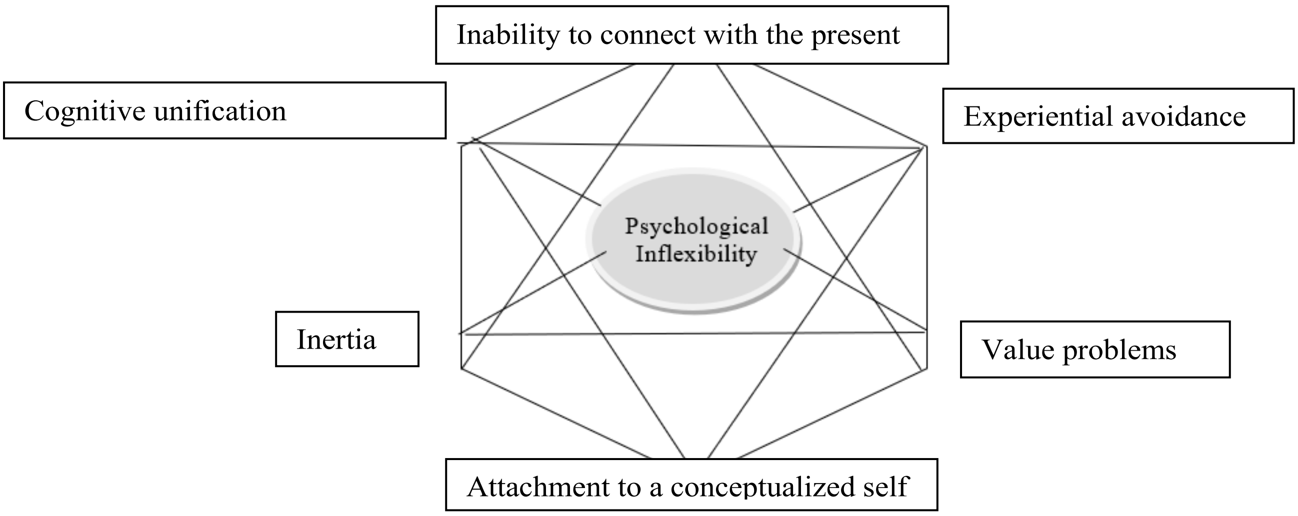

Figure 1. Psychological Inflexibility Model (Hayes et al., 2006).

Individuals can apply for the option of spending time on the Internet in order to cope with difficult situations they face, such as problems with the development of a sense of identity and meaningful, intimate relationships (Kandell, 1998). With the increase in access to the Internet

(Turkish Statistical Institute [TUIK], 2019), there is also an increase in the risks hosted by online platforms (Kaşıkçı et al., 2014), and internet addiction is considered one of these risks (Block, 2008; Guan and Subrahmanyam, 2009). Internet addiction is defined as the fact that a person's internet use habits and patterns are so problematic that they negatively affect a person's functionality in life (Beard and Wolf, 2001). Negative functionality in a person's life can sometimes be interpreted as a triggering reason for internet addiction. Online environments are attractive to users who have less control over their real-life functions because they provide a person with opportunities such as the ability to edit information, give commands, or avoid them (Kandell, 1998).

One of the risks that increases with Internet use is cyberbullying (Smith et al., 2008). All ongoing, harmful, and intentional negative attitudes and behaviors by groups or individuals are called bullying (Olweus, 1994). Cyberbullying is considered the continuation of traditional bullying behaviors in virtual environments (Campbell, 2005). The possibility of remaining anonymous in a virtual environment has an encouraging effect on bullies (Mishna et al., 2009). It is known that cyberbullying has the effects of increasing the likelihood of emotional problems in cybervictims, having difficulty establishing bilateral relationships, and feeling pushed into loneliness (Dinç, 2020).

METHOD

Research Design

In this study, a correlational research model was used to investigate the relationship between psychological inflexibility, internet addiction levels, and cyberbullying sensitivity levels of university students. Correlational research is used to investigate the relationships between variables (Shaughnessy, Zechmeister, and Zechmeister, 2012). The dependent variable of this research is psychological inflexibility, and the independent variables are sensitivity to Internet addiction and cyberbullying sensitivity.

Research Sample

A total of 427 teacher candidates, 318 of whom are women (74.5%) and 109 of whom are men (25.5%), studying at a university in the Central Anatolia Region, constitute the working group of this research. The age ranges of the participants are from 18 to 27, and the average age was 22.

Research Instruments and Processes

The working group for the research consists of 561 university students, 473 of whom are women and 88 of whom are men, who are studying in various departments at the state university in the Central Anatolia Region in 2020–2021. As data collection tools, Acceptance and Action Form-2, Young's Internet Addiction Test-Short Form (YIAT-SF), the Sensitivity Scale Related to Cyberbullying, and the Personal Information Form were used.

Acceptance and Action Form-2: Acceptance and Action Form-2, developed by Bond et al. (2011), has been adapted to Turkish culture by Yavuz et al. (2016). The Turkish form is in 7-point Likert type, as in the original (1: It is never correct. 7: Always true), which consists of 7 items. Although there is no reverse clause in the form, high scores indicate a high level of psychological inflexibility. In the adaptation study, the Cronbach alpha coefficient of the form was found to be 0.84. As a result of the values obtained, the form is accepted as a reliable measurement tool. For this research, the Cronbach Alpha coefficient number was found to be 0.87.

Young's Internet Addiction Test-short Form (YIAT-SF): Test, which was developed by Young (1998) and converted to YIAT-SF by Pawlikowski, Altstotter-Gleich, and Brand (2013). It's five-likert-type (1=never, 5=very often) and consists of 12 items. YIBT-SF has been adapted into Turkish by Kutlu, Savcı, Demir and Aysan (2016). The scale does not contain inverse matter. It is accepted that the level of Internet addiction increases as the total score increases. In the adaptation study, the Cronbach alpha coefficient was found to be 0.91 in university students and 0.86 in adolescents. According to the obtained values, it is possible to say that the scale is a reliable measurement tool. For this research, the Cronbach Alpha coefficient number was found to be 0.85.

The Sensitivity Scale Related to Cyberbullying: The Sensitivity Scale Related to Cyberbullying was developed by Tanrıkulu et al. (2013). It is a single-factor, triple-likert (1=no, 2=sometimes, 3=yes) type scale consisting of 13 items and does not contain any items that are scored inversely. The lowest score that can be taken from the scale is 13, and the highest score is 39. The height of the score obtained from the scale indicates a high level of sensitivity to cyberbullying. The number of internal consistency coefficients in the first psychometric findings of the scale was 83. For this research, the Cronbach Alpha coefficient number was found to be 0.80. According to the obtained values, it is possible to say that the scale is a reliable measurement tool.

Personal Information Form: The Personal Information Form created by the researcher has been created in order to collect general information from the individuals who will participate in the research. Personal information form: the gender of the participants, the state of having a romantic relationship, the perceived level of family income, perceived by mom and dad upbringing stance, daily internet usage time on weekdays and weekends, daily internet usage time, the purpose of internet use, social media use social media daily to determine the duration of the purpose of usage and consists of questions.

Implementation Process

For the scales used in the study, necessary permissions were obtained from the researchers who adapted or developed them. The measurement tools were delivered online to the volunteer participants, and the data were collected during a 1-week period in the 2020–2021 academic year. The Google Forms link containing the measurement tools was shared with the volunteer participants, and it was ensured that every question was answered in order to be taken into statistical evaluation.

Data Analysis

The SPSS 20.00 software was used in the statistical analysis of the data. The scales were initially administered to 577 participants. The “Mahalobis” distance value was calculated to obtain and remove extreme values. Following data loss, data from 561 participants was included in the analysis. After removing extreme values, skewness and kurtosis coefficients and their average values were examined in order to investigate the normal distribution feature of the scores obtained from the variables. Frequency, reliability, and multiple linear regression analyses were performed to analyze the data obtained. During the statistical analysis process, a normality test was performed to understand whether the data sets showed a homogeneous distribution. In order to compare the quantitative differences in data between two groups in tests showing homogeneous distribution, an independent samples t test was used from parametric tests, and a one-way analysis of variance (ANOVA) was used to compare the differences between more than two groups for the evaluation of quantitative data. Within the scope of variance analysis procedures, Tukey's multiple comparison test was used to understand which groups had differences between the groups. In order to perform correlational operations in the study, the Pearson Product Moment Correlation Coefficient was included in the analysis. Multiple linear regression analysis was used to examine the linear correlation between the independent variables and the dependent variable.

Ethic

This study was prepared from a master's thesis. With its evaluation dated 18.12.2020, Necmettin Erbakan University Social and Human Sciences Scientific Research Ethics Committee decided that there are no ethical concerns or issues associated with conducting the research with the decision number 2020/116. (18/12/2020, 2020/116).

RESULTS

Table 1. *Correlation coefficients, means and standard deviations of the study variables*

Varieables	N	Mean	SD
Psychological Inflexibility	561	25.82	10.151
Internet Addiction	561	27.68	8.332
Cyberbullying Sensitivity	561	32.54	4.797

While psychological inflexibility scores are spread further from the mean, sensitivity scores for internet addiction and cyberbullying are spread closer to the mean according to standard deviation value.

Table 2. *T Test Results of Psychological Inflexibility Scores of University Students According to Gender Variable*

Varieables	Gender	N	Mean	SD	t	p
Psychological Inflexibility	Female	473	26.11	559	1.576	.116
	Male	88	24.26	88		

***$p < .05$

Looking at the Table 2 as a result of the comparisons made, it was observed that there was no significant difference between the psychological inflexibility score averages of university students according to the gender variable. (p=.116, p<.05)

Table 3. *T Test Results of University Students' Psychological Inflexibility Scores According to the Romantic Relationship Variable*

Varieables	Relationship	Mean	SD	t	p
Psychological Inflexibility	Present	26.91	559	1.606	.109
	Absent	24.39			

***$p < .05$

Looking at Table 3, there was no significant difference between the psychological inflexibility score averages of university students according to the variable of having a romantic relationship. (p=.109, p<.05)

Table 4. *The Data of the Psychological Inflexibility Score Averages of University Students According to the Perceived Family Income Level*

Variables	Family Income	N	Mean	SD

	Level			
Psychological Inflexibility	Low	89	29.32	9.81
	Medium	432	25.14	10.00
	High	40	25.42	11.09

In Table 4, it can be seen that the highest score perception regarding the psychological inflexibility mean scores of those held at universities is stated by those with low family income levels ($\bar{x}$ =29.32). Respectively, those with high income ($\bar{x}$ = 25.42) and those with medium income ($\bar{x}$ = 25.14).

Table 5. *The Results of One-Way Variance Analysis of Psychological Inflexibility Score Averages of University Students According to Perceived Family Income Level*

Varieables		**SS**	**SD**	**MS**	**F**	**p**	**Relation**
Psychological Inflexibility Scale Mean Scores	Between Groups	1299.168	2	649.584	6.425	.002***	1-2
	Within Groups	56415.712	558	101.103			
	Total	57714.881	560				

***$p < .05$ *(1: Low family income, 2: Medium family income)*

Examining Table 5, it was found that the psychological inflexibility score averages of university students differed significantly according to the perceived family income level variable. (p=.002, p<.05) By looking at the Tukey test, it was found that this differentiation was between students with a low perceived family income level and students with a medium perceived family income.

Table 6. *The Data of the Psychological Inflexibility Score Averages of University Students According to the Internet Usage Time on Weekdays*

Varieables	**Internet Usage on Weekday**	**N**	**Mean**	**SD**
Psychological Inflexibility	0-2 hours	108	23.50	10.81
	3-4 hours	189	25.84	9.91
	5-6 hours	133	25.89	9.75
	6 hours and more	131	27.64	10.05

Examining Table 6, it is found that the psychological inflexibility mean scores of university students differ significantly according to the variable of internet usage time on weekdays. (p=.019, p<.05) Looking at the Tukey test, it is seen that this difference is between students whose internet usage time is 0-2 hours on weekdays and those whose internet usage time is 6 hours or more.

Table 7. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University Students According to the Duration of Internet Usage Time on Weekdays*

Varieables		**SS**	**SD**	**MS**	**F**	**p**	**Relation**
Psychological Inflexibility Scale Mean Scores	Between Groups	1020.269	3	340.090	3.341	0.19***	1-4*
	Within Groups	56694.612	557	101.786			
	Toplam	57714.881	560				

***$p < .05$ (1: 0-2 hours, 4: 6 hours and more)

Examining Table 7, it was found that the psychological inflexibility score averages of university students differed significantly according to the internet usage time variable on weekdays.

(p=.019, p<.05) By looking at the Tukey test, it is seen that this differentiation is among students whose internet usage time is 0-2 hours on weekdays and 6 hours and more.

Table 8. *The Data of the Psychological Inflexibility Score Averages of University Students According to the Internet Usage Time on Weekends*

Varieables	Internet Usage on Weekend	N	Mean	SD
Psychological Inflexibility	0-2 hours	75	23.50	9.55
	3-4 hours	158	24.43	10.33
	5-6 hours	147	26.13	9.96
	6 hours and more	181	27.75	10.08

Examining Table 8, when looking at the psychological inflexibility mean scores of university students, it is seen that the students who use the internet for 6 hours or more on the weekends get the highest score ($\bar{x}$ = 27.75). Then respectively, It is seen that students whose internet usage time is 5-6 hours ($\bar{x}$ = 26.13), 3-4 hours ($\bar{x}$ = 24.43) and 0-2 hours ($\bar{x}$ = 23.50) on the weekend.

Table 9. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University Students According to the Internet Usage Time on the Weekend*

Varieables		SS	SD	MS	F	p	Relation
Psychological Inflexibility Scale Mean Scores	Between Groups	1396.309	3	465.436	4.603	.003***	1-4* 2-4*
	Within Groups	56318.572	557	101.111			
	Total	57714.881	560				

****p < .05 (1: 0-2 hours, 2: 3-4 hours and 4: 6 hours and more)*

It has been found that the psychological inflexibility score averages of university students differ significantly according to the weekend internet usage time variable. (p=.003, p<.05) This differentiation was examined by looking at the Tukey test. It is observed that there is a significant relation between students with 0-2 hours of internet use on the weekend and 6 hours and more, and between students who use the Internet for 3-4 hours and 6 hours and more on the weekend.

Table 10. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University*

Variables		SS	SD	MS	F	p	Relation
Psychological Inflexibility Scale Mean Scores	Between Groups	1414.046	2	707.023	7.007	.001***	1-2* 2-3*
	Within Groups	56300.834	558	100.898			
	Total	57714.881	560				

****p < .05 (1: Shopping 2: For information purposes 3: Hobbies)*

Table 10 shows the results of the one-way analysis of variance test of the psychological inflexibility score averages of university students according to the internet use purpose variable. In the analysis results, it is seen that the psychological inflexibility scores of university students differ significantly according to the purpose of internet use (p=.003, p<.05). This difference is in favor of the group using it for shopping purposes and between the group using it for information acquisition and in favor of the group using it for hobby purposes. The average psychological inflexibility scores of the group using the Internet for shopping purposes and the group using it for hobby purposes are significantly higher.

Table 11. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University Students According to the Duration of Daily Use of Social Media*

Variables		**SS**	**SD**	**MS**	**F**	**p**
Psychological Inflexibility Scale Mean Scores	Between Groups	1043.614	3	347.871	3.419	.017***
	Within Groups	56671.266	557	101.744		
	Total	57714.881	560			

****p < .05*

In Table 11 the results of one-way variance analysis of the psychological inflexibility score averages of university students according to the social media daily usage time variable are given. In the analysis results, it is seen that the psychological inflexibility scores of university students differ significantly according to the duration of daily use of social media. ($p=.017$, $p<.05$) This difference is between university students with a daily social media usage time of 5-6 hours and students who do not use social media. It has been found that the psychological inflexibility scores of university students with a daily social media usage time of 5-6 hours are significantly higher.

Table 12. *The Correlational Results of the Relationship Between Psychological Inflexibility, Internet Addiction and Cyberbullying Sensitivity Levels of University Students*

Variables	Psychological Inflexibility	Internet Addiction	Cyberbullying Sensitivity
Psychological Inflexibility	1		
Internet Addiction	.410**	1	
Cyberbullying Sensitivity	.088*	-.065	1

***p<.01, *p<.05*

Examining Table 12, a significant and positive relationship was found between the psychological inflexilibility score averages of university students and the internet addiction score averages ($r=.41$, $p<.01$). A positive significant relationship was found between the psychological inflexilibility score averages of university students and the sensitivity score averages related to cyberbullying ($r=.08$, $p<.05$). There was no statistically significant relationship between the average internet addiction score of university students and the average sensitivity score related to cyberbullying ($r=-.06$, $p>.05$).

Table 13. *The Results of the Regression Analysis regarding the Psychological Inflexibility Score Averages*

Variables	**B**	**Standart Error**	**β**	**t**
1.Constant	3.872	3.044		1.272
2.Internet Addiction	.508	.047	.417	10.858
3.Cyberbullying Sensitivity	.243	.081	.115	2.985

Examining Table 13, it is seen that internet addiction and its sensitivity to cyberbullying give a statistically significant relationship with psychological inflexibility as a result of multiple linear regression analysis ($R=.42$, $R^2=.18$, $p<.01$). Accordingly, the predictive variables together explain 18% of the variance in psychological inflexibility. When the standardized (β) coefficient and t values are examined, it can be said that Internet addiction and sensitivity to cyberbullying, respectively, are a significant predictor of psychological inflexibility as a level of relative importance.

DISCUSSION

This research aims to examine the role of internet addiction and cyberbullying sensitivity on the psychological inflexibility of university students. In this study, no statistically significant difference was found between the psychological inflexibility levels of university students and the gender variable. Research supporting this finding is found in the literature of the field (Dağgeçen-Başsu, 2016; Hayes et al., 2004; Toprak et al., 2020). In addition to the studies showing that there is no significant relationship, there are also studies that have found that psychological inflexibility differs significantly in favor of women according to gender (Masuda et al., 2014; Masuda et al., 2015; Stapleton et al., 2020).

One of the findings of this research is that the psychological inflexibility score averages of university students differ significantly according to the perceived family income level between the group with a low perceived family income level and the group with a high perceived family income level. Children who are exposed to a poor family environment and poor financial opportunities from early childhood experience a delay in cognitive flexibility compared to their peers (Clearfield and Niman, 2012). Since it is known that the characteristics of the developmental period and the environmental effect are effective in the formation of psychological inflexibility and experiential avoidance (Chou et al., 2018), it can be considered that the psychological inflexibility levels of university students begin to take shape at a young age depending on the perceived family income level or that the basis of their inflexibility levels depends on the conditions in childhood.

It was found that the average psychological inflexibility score of university students significantly differed between the group using 0–2 hours daily and the group using 6 hours and more, in favor of the group using for longer periods of time according to the duration of internet use on weekdays and the duration of internet use on weekends. Looking at the literature, increasing the amount of time spent on the Internet poses a risk for Internet addiction (Tonioni et al., 2012), and it is found that psychological inflexibility increases as the severity of Internet addiction increases (Chou et al., 2017; Dong et al., 2014). There are also studies suggesting that increasing psychological inflexibility triggers Internet addiction (Chou et al., 2018). The fact that Internet addiction is an addiction that triggers social apathy (Prosecutor and Aysan, 2017), negatively affects a person's sharing of his inner world (Arslan and Kiper, 2018), and prevents him from meeting new people (Anderson, 2001) is one of the dimensions of psychological inflexibility and experiential avoidance (Hayes et al., 2006). It is thought that it may cause inflexibility by negatively affecting its size.

It has been found that the psychological inflexibility scores of university students who use the Internet for shopping purposes are significantly higher than those of other students. Unlike this study of college students, according to the purpose of internet use, internet addiction in a study that examines the levels of internet, "leisure" and "social relationships" use for purposes students who were found to have higher internet addiction scores (Aksoy and Ünübol, 2021; Ceyhan, 2011).

The psychological inflexibility scores of college students who spent 7 hours and more per day on social media are statistically significantly higher than those of those groups who spent 1-2 hours, 3-4 hours, 5-6 hours per day, and the group who don't use social media. One of the biggest motivating reasons for using social media is disconnection from real life and avoidance of experiences (Coyne et al., 2013). Considering the possibility of "avoiding the lives" that social media provides to people, the idea that people have lost their psychological flexibility comes to mind.

In this study, it was found that cyberbullying predicts psychological inflexibility. When the literature is examined, various studies in which cyberbullying and psychological inflexibility variables are considered together show that psychological inflexibility has an effect on cyberbullying (Kinnari and Tysk, 2020; Yalnız, 2019). Accordingly, it has been thought that there may be a mutual effect between cyberbullying and psychological inflexibility.

According to this research, along with the sensitivity variables related to internet addiction and cyberbullying, the psychological inflexibility scores of university students have a significant relationship. It can be interpreted that feeling rejected by being bullied and being dependent on an online environment where one has excessive control due to internet addiction makes psychological flexibility, which includes the acceptance of unexpected life events, difficult. 18% of the total variance in psychological inflexibility is predicted by predictive variables.

Studies have shown that Internet addiction causes a decrease in flexibility (Dong et al., 2014). People with Internet addiction are more prone to maintaining a certain behavior than reacting to a behavior change when faced with an incompatible situation compared to healthy individuals (Dong et al., 2014). It can be said that their cognitive inflexibility also affects their actions, causing a decrease in psychological flexibility in behavior and thought. According to a study, young adults with Internet addiction are more inclined to avoid and remain inactive than to use strategies to cope with situations such as stress (Cheng et al., 2015). Similarly, it is known that other addictions have a negative effect on cognitive flexibility (Odlaug et al., 2011).

Considering the fact that students with low family income levels have higher psychological inflexibility, it is clear that factors such as financial security and opportunities may have an impact on people's psychological rigidity levels. In this regard, psychoeducation programs can be organized to reduce and control psychological rigidity, especially for people who have just started university. It is thought that content that emphasizes alternative ways to support psychological flexibility and methods of coping with the conditions they are in may be beneficial for people who tend to lose psychological flexibility due to financial means and financial concerns. As an alternative to the time spent on the Internet, it is thought that it will be useful to support young people in their hobbies and activities that will support their face-to-face social relationships.

Defining and investigating the dimensions and situations that cause psychological rigidity to increase as family income levels decrease will contribute to the literature. Whether this situation is due to a lack of financial means or a result of this lack is one of the issues that need to be investigated.

It may be useful to conduct further studies on the current time management skills of first-year university students, whose psychological flexibility decreases as their internet use increases during weekdays and weekends, their increased internet usage time, and their tendency to turn to online environments. It is thought that researching the process of adaptation to university life, which is a new social environment they are involved in, together with variables such as social relationship skills, self-confidence, and social appearance anxiety, may shed light on the underlying reasons for the increase in internet use.

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The Effect of Understand-Answer Strategy Instruction on Reading Comprehension of Students with Learning Disabilities

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Article Info **ABSTRACT**

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Keywords:
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The purpose of this research is to determine the effect of the Understand-Answer Strategy on the reading comprehension skills of students with learning disabilities. The research was carried out with students diagnosed with learning disabilities attending secondary schools in Pendik, Istanbul, affiliated with the Ministry of National Education. The selected students are between the ages of 12 and 13, with two girls and one boy. The research was carried out with a single-subject design, a "Multiple probe design between subjects". The dependent variable of the study is the number of correct answers given to the reading comprehension questions in a written reading comprehension text. The independent variable of the research is the Understand-Answer Strategy. The experimental process consisted of the stages of determining the starting level, teaching the Understand-Answer Strategy, end-of-teaching evaluation, monitoring, and generalization. At the end of the study, the opinions of the students and their families were also considered. The Understand-Answer Strategy consist of activating prior knowledge, discussing the strategy, being a model, guiding practices and independent practices. At the end of the research, the opinions of students and their families were examined as social validity data. In all evaluation conditions, students were asked to read a narrative text and then answer eight reading comprehension questions. The scoring of the data was determined by the correct answers given by the students to the questions. The research findings have shown that the Understand-Answer Strategy is effective in improving the reading comprehension skills of students with learning difficulties. Furthermore, students who learned this strategy were able to provide correct answers to reading comprehension questions 1, 3, and 5 weeks after the end of the application, and it was observed that students who learned the strategy with different participants generalized their reading comprehension performance. According to the social validity findings, students and their families expressed positive views about the Understand-Answer Strategy.

Anla-Cevapla Stratejisi'nin Öğrenme Güçlüğü Olan Öğrencilerin Okuduğunu Anlama Becerisindeki Etkisi

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Bu araştırmanın amacı, Anla-Cevapla Stratejisi'nin öğrenme güçlüğü olan öğrencilerin okuduğunu anlama becerilerindeki etkisini belirlemektir. Araştırmanın katılımcıları ortaokula devam eden öğrenme güçlüğü tanısı almış 12-13 yaş aralığında öğrencilerdir. Araştırmada tek denekli desenlerden "denekler arası çoklu yoklama deseni" kullanılmıştır. Araştırmanın bağımlı değişkeni, öyküleyici metinlere ilişkin okuduğunu anlama sorularına verilen doğru cevap sayılarıdır. Araştırmanın bağımsız değişkeniyse Anla-Cevapla Stratejisi öğretim paketidir. Deney süreci; başlama düzeyinin belirlenmesi, Anla-Cevapla Stratejisi'nin öğretim paketinin uygulanması, öğretim sonu değerlendirme, izleme ve genelleme aşamalarından oluşmaktadır. Anla-Cevapla Stratejisi öğretimi; ön bilgileri harekete geçirme, stratejiyi tartışma, model olma, rehberli uygulamalar ve bağımsız uygulamalar aşamalarından oluşturulmuştur. Araştırmanın sonunda sosyal geçerlilik verisi olarak öğrencilerin ve ailelerinin görüşleri incelenmiştir. Tüm değerlendirme koşullarında öğrencinin öyküleyici metni okuması ve sonrasında kendisine yöneltilen sekiz okuduğunu anlama sorusunu cevaplaması istenmiştir. Verilerin puanlanmasını öğrencilerin sorulara verdikleri doğru cevaplar belirlemiştir. Araştırma bulguları, Anla-Cevapla Strateji'sinin öğrenme güçlüğü olan öğrencilerin okuduğunu anlama becerilerinde etkili olduğunu göstermiştir. Ayrıca bu stratejiyi öğrenen öğrencilerin, uygulama sona erdikten 1, 3 ve 5 hafta sonrasında okuduğunu anlama sorularına doğru cevap verdiklerini ve farklı katılımcılarla stratejiyi öğrenen öğrencilerin okuduğunu anlama performanslarını genellediği görülmüştür. Sosyal geçerlilik bulgularına göre öğrenciler ve aileleri Anla-Cevapla Stratejisine ilişkin olumlu görüş bildirmişlerdir.

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INTRODUCTION

Reading is considered a prerequisite for academic skills to make human life more meaningful (Özdemir & Baş, 2019). Reading is defined as the process of establishing meaning that occurs in a specific environment in the light of a correct technique and target, depending on the effective communication between the writer and the reader of the reading text in which prior knowledge is activated (Akyol, 2017). The most important function of reading is to provide comprehension. Comprehension is to grasp what we see and hear. Symbols come side by side and form only writings. When these symbols are brought together, if a meaning is derived from them, then reading is realized (Göğüş, 1978). Göğüş defined reading comprehension as a cognitive activity consisting of complex steps starting with the formation of words with written symbols (Perfetti & Stafura, 2014). Fluent reading is important for reading comprehension (Rasinski et al., 2011). Fluent reading is reading performed as if speaking, without spelling errors, pauses, or the need to pay attention to intonation and emphasis (Akyol, 2017). For reading fluency to be realized, it is necessary to have correct words read during reading, normal reading speed, and prosodic reading skills (Baştuğ, 2012).

Reading comprehension skills are of great importance not only for students with normal development but also for students with special needs (Eripek, 1987). Among individuals with special needs, individuals with learning disabilities are the most numerous group (Ulutaş et al., 2020). The reason for most of the difficulties faced by students with learning disabilities is that they do not have sufficient reading comprehension skills (Akçamete, 2015). Since students with learning disabilities cannot use strategies effectively, they show low academic performance in every period of their lives (Swanson & De La Paz, 1998). This problem situation faced by students with learning disabilities stems from the difficulties in the correct use of reading comprehension strategies.

The most important factor that helps reading comprehension and helps students increase their academic achievement is reading comprehension strategies (Balcı & Dündar, 2017; Özkubat et al., 2020). When international literature is examined, it is seen that the results of cognitive strategy instruction studies applied with the aim of providing reading comprehension skills to students with learning disabilities are effective (Mastropieri & Scruggs, 1997). When the results of the studies conducted on the basis of cognitive strategy instruction are examined, it is clearly seen that it is effective in the reading comprehension of students with learning disabilities (Jitendra, Cole, Hoppes & Wilson, 1998). In the literature, meta-analysis studies in which the studies applied into improving the reading comprehension skills of students with learning disabilities were examined, it was seen that the use of cognitive and metacognitive strategies was effective in reading comprehension skills (Forness et al., 1997; Gajria et al., 2007; Gersten et al., 2001; Kim et al., 2012).

Due to the COVID-19 pandemic, this study was conducted online as in-person education was disrupted. When the literature was examined, no study was found in which reading comprehension strategies were taught online to students with learning disabilities. In the literature, the development of pre-reading, during-reading, and post-reading strategies in order to improve reading comprehension is emphasized, as well as the importance of gaining strategies holistically (Özmen, 2006). While there are many studies designed with a holistic perspective in the international literature (Idol & Croll, 1987; Mastropieri & Malone, 1991; Salembier, 1999), there are a limited number of studies in the national literature (Fırat & Ergül 2020; Tülü et al., 2021). When the literature was examined, the limitation of online research and research studies involving both online and holistic perspectives created a need for the current study. Relatedly, this study aims to improve the reading comprehension skills of middle school students with learning disabilities, and the effectiveness of the Understand-Answer Strategy, which was prepared with a holistic perspective and presented online, was investigated in order to provide reading comprehension skills to middle school students with learning disabilities. In line with this general purpose, the effect of the Understand-Answer Strategy on the reading comprehension skills of students with learning disabilities, its effect on reading comprehension skills after 1, 3, and 5 weeks, its generalization to different practitioners, and student and teacher opinions about the strategy were examined.

METHOD

Research Design

In this study, a multiple probe between subjects design, one of the single-subject research methods, was used.

In order to measure the reading comprehension performance of the subjects, baseline data were collected from each of the three subjects. Baseline data were collected 44ort he first subject in three consecutive sessions. When the reading comprehension performance of the first subject showed stability, the Understand-Answer Strategy instructional package was applied to the first subject. At the end-of-instruction assessment, when the accuracy level reached 80% and above and the data were stable, the end-of-instruction assessment was conducted by having the first subject answer the questions of the narrative texts at least three sessions in a row as in the baseline. When the end-of-instruction data of the first subject showed stability and the student's progress reached 80% and above the accuracy level, the baseline level was determined 45ort he second subject in order to evaluate his/her performance in answering reading comprehension questions by reading narrative texts in three consecutive sessions. At the same time, one session of baseline data was collected from the third subject. This process continued until the independent variable was applied to all subjects. In order to evaluate the continuity of skill acquisition at the end of the instruction, follow-up data were collected once from each subject 1, 3, and 5 weeks after the instruction. In addition, generalization data were collected with all three subjects once after the instruction in different participants and settings.

The dependent variable of the study is the number of correct answers given to the reading comprehension questions related to the narrative texts. The independent variable is the Understand-Answering Strategy teaching package.

Three students diagnosed with learning disabilities who were included in the inclusion program in secondary school classes in the Pendik district of Istanbul province participated in the study. The subjects were selected among students who a) read at least 80 words per minute, b) attended the 6th and 7th grades of secondary school, and c) regularly participated in online programs.

Development of the Understand-Answer Strategy

The Understand-Answer Strategy used to improve the reading comprehension skills of students with learning disabilities was adapted from the Solve It! Strategy, which has cognitive and metacognitive elements. Solve It! Strategy is an effective strategy for solving math problems (Chung & Tam, 2005; Karabulut, 2015; Karabulut & Özmen, 2018). Based on the high correlation between reading comprehension skills and problem-solving skills; Solve It Strategy, which is a problem-solving strategy, has been adapted as Understand-Answer Strategy to improve reading comprehension skills (Prakitipong & Nakamura, 2006; Tertemiz, 1994; Tuohimaa et al., 2008). In these adaptations, three strategy steps were removed from the Solve It! strategy and replaced with 'Comment' and 'Predict' strategies from pre-reading strategies and the 'Take Notes' strategy from during reading strategies. Solve It! The Calculate step in the Solve It! strategy was renamed and used as the 'Answering Questions' strategy from the post-reading strategies. Thus, the 7-step Understand-Answer Strategy was created (Carnine et al., 1996; Güneş, 2014; Palincsar & Brown, 1984). In addition, While teaching the Understand-Answer Strategy, the instructional phases involved activating prior knowledge, discussing the strategy, modeling, guided practice, and independent practice, which were adapted from the Self-Regulation Strategy Development Approach (Case et al., 1992).

Supports were used for students with learning difficulties to learn the Understand-Answering Strategy (Güzel-Özmen, 2011). These supporters are the Understand-Answering Strategy Monitoring Sheet, Narrative Text Sheet, and Reading Comprehension Questions Sheet. The Understand-Answer Strategy consists of seven stages. Each stage has "say, ask, and check" steps. Table 1 below shows the steps and stages of the comprehension-answering strategy.

Table 1. *Understand-Answer Strategy Steps*

1- Comment (Discuss what you know.)	Say: Tell what you know about the text title, and talk about the pictures. Ask: Did I say everything I know? Check: What did you say about the text?
2- Guess (What might he want?)	Say: Guess what can be asked about the text. Ask: Did I more or less predict the questions about the text? Check: Did I catch an important question?
3-Read the text (Read to understand.)	Say: Read the text and if you don't understand it, read it again. Ask: Have I read and understood the text? Check: Go through the Reading Comprehension questions.
4- Explain (In Your Own Words.)	Say: Present the text in your own words. Ask: What does it want me to answer? What am I looking for? Check: Does the information match the text?
5- Take Notes (Create clues with words.)	Say: Make notes in the margins of the questions with words to remember the answers. Ask: Do the words consist of what the question asks for? Check: Are the jotted-down words the answers to the questions?

6- Answering Questions (Answer the questions.)	Say: Write the answers to the question in the blanks. Ask: Did I answer all the questions? Check: Did I write everything that was asked?
7- Check (Make sure everything is correct.)	Say: Check the answers. Ask: Did I check each question? Check: Is everything correct, if not go back, and ask for help if you need help.

Understand-Answer Strategy Teaching Stages

The Understand-Answer Strategy consists of five implementation stages. The strategy steps shown in Table 1 are presented in the following steps. Activating prior knowledge stage, The student will be guided through the study's purpose, key text elements, title, visual aids, reading material, and the necessary steps to complete while answering reading comprehension questions to effectively apply the comprehension strategy (Milford & Harrison, 2010; Reid & Lienemann, 2006). Modeling stage, the practitioner will model by thinking aloud about which supports to use in which order and how to use them in all stages of the Understand-Answer Strategy and self-instruction statements through a sample text. In the modeling sessions, there will be different text examples given to the student with the text in which the researcher applies the strategy. Guided practice stage, In the first session of this stage, the student will first answer reading comprehension questions using the Understand-Answer Strategy under the guidance of the practitioner. When necessary, the practitioner will model self-instruction statements and guide the student in the implementation of the strategy steps. Independent practice. At this stage, the student is ready to use the strategy independently. The teacher's task is to observe the accuracy and consistency of the student's performance (Reid & Lienemann, 2006).

Selection of Texts

The narrative texts used in this study were selected from the Reading Comprehension Sets published by Prof. Dr. Emine Rüya ÖZMEN, who has conducted many scientific research studies in the field of special education and prepared training sets, in Ya-Pa Publications. Each of these sets contains seven narrative texts with the same theme and each narrative text has eight reading comprehension questions.

Experiment Process

In this study, baseline sessions, instructional sessions, follow-up, and generalization sessions were organized for each subject in order to improve their reading comprehension skills with the Comprehension-Response Strategy for Students with Learning Disabilities.

During the research process, firstly, interviews were conducted in the special education classroom in the school researchers attended in order to meet the students face-to-face and to obtain legal permission from their families. The implementer gave all necessary worksheets to the students in closed files before the implementation process started. Since all sessions of the study were conducted online, researchers were conducted in the study rooms where the participants had their own computers at home.

A pilot study was conducted online with one student to gain the practitioner's experience and to see if there were any flaws in the strategy package. The pilot study continued until the subject acquired the strategies.

Baseline sessions. At the beginning of the experimental period, baseline data were collected from all students at the designated times for each subject. Then, baseline data were collected from the first student at least three times in a row until the data showed stability. When the first student reached an accuracy level of 90% and above in the end-of-instruction assessment and the data were stable, baseline data were collected from the second student. When the second student reached the criterion level at the end of the instruction, baseline data were collected from the third student. No feedback or correction was given to the students during baseline collection. Baseline data continued to be collected until stable data were obtained in three consecutive sessions. The baseline sessions were organized one-on-one online at each student's home computer.

Teaching sessions. The following section provides information about the implementation of the Understand-Answer Strategy and the instructional sessions. After obtaining the stable data at baseline levels, the Understand-Answer Strategy was implemented. The strategy was continued until the students answered 7 out of 8 reading comprehension questions correctly. The days and hours of applying the strategy to the students are shown in Table 2.

Table 2. *Subjects' Starting Time of Work Every Weekday*

	Mobilizing Preliminary Information	Discussion	Modeling	Guided Practices	Standalone Applications
Subject 1	12.00	12.00	12.00	12.00	12.00
Subject 2	12.00	12.00	12.00	12.00	12.00
Subject 3	12.00	12.00	12.00	12.00	12.00

Instructional sessions were applied to each student for 30 minutes every day until the end of the instructional phases. The study was completed in a total of 3 months. In the Understand-Answer Strategy instructional process, the activation of the prior knowledge phase for Subject 1 lasted three sessions 90 minutes, the discussion phase lasted three sessions 90 minutes, the modeling phase lasted five sessions 150 minutes, the guided practice phase lasted three sessions 90 minutes, and the independent practice phase lasted three sessions 90 minutes. For Subject 2, the activation of the prior knowledge phase lasted three sessions 90 minutes, the discussion phase lasted three sessions 90 minutes, the modeling phase lasted five sessions 150 minutes, the guided practice phase lasted four sessions 120 minutes, and the independent practice phase lasted three sessions 90 minutes. For Subject 3, the activation of the prior knowledge phase lasted three sessions 90 minutes, the discussion phase lasted three sessions 90 minutes, the modeling phase lasted five sessions 150 minutes, the guided practice phase lasted three sessions 90 minutes, and the independent practice phase lasted three sessions 90 minutes.

In the experimental process, 17 sessions of 8 hours and 30 minutes were spent for Subject 1, 18 sessions of 9 hours for Subject 2, and 17 sessions of 8 hours and 30 minutes for Subject 3. The number of teaching sessions applied to the students in the experimental process is shown in Table 3.

Table 3. *Number of Instruction Sessions Applied to Students*

Instruction Sessions	Subject 1	Subject 2	Subject 3
Developing and activating background knowledge	3	3	3
Discussion	3	3	3
Modeling	5	5	5
Supporting the strategy	3	4	3
Independent Practice	3	3	3
Total	17	18	17

Follow-up sessions. In this study, the follow-up sessions were conducted 1, 3, and 5 weeks after the study ended. The follow-up sessions were conducted in the same way as the baseline sessions.

Generalization sessions. In the generalization session of this study, the pretest-posttest method was used. The generalization session was conducted online by the students and the special education teacher at the students' school in their own homes.

Data Collection

In this study, efficacy, reliability data, and social validity data were collected.

Collecting effectiveness data. Assessment was made to determine the correct answers of the students to the reading comprehension questions at the baseline, at the end of the instruction, and at the monitoring and generalization phases. Giving the desired answers to the questions was accepted as the correct answer, giving answers other than the requested information or leaving them blank was accepted as the wrong answer. Leaving it blank was accepted as an incorrect answer. The number of correct answers was determined by looking at the Reading Comprehension recording chart. Follow-up and generalization data were collected and scored in the same way.

Collecting reliability data. In the research process, two types of data were collected: inter-rater reliability data and implementation reliability data. The reliability data collection process was completed by numbering the baseline, end-of-instruction, follow-up, and generalization sessions separately , which was followed by monitoring them through a random assignment table. Inter-observer and treatment reliability data were collected in at least 30% of the sessions.

Collecting inter-observer reliability data. First of all, the observer of the study was informed about the "Understand-Answer Strategy" and the process followed in the teaching sessions. The application videos were watched by an expert with three years of experience in the field of special education and observer reliability data were collected by marking them on the Observer Reliability Record Form.

Collection of implementation reliability data. In this study, the observer examined whether the implementation took place in line with the plans. In this regard, the observer watched the teaching sessions conducted by the implementer, and the data obtained were recorded in the Implementation Reliability Form.

Collection of social validity data. The Student Social Validity Questionnaire was administered to determine students' opinions about the Understand-Answer Strategy. Students were told that they could ask anything they did not understand in the survey questions.

Data Analysis

In this section, the effectiveness, reliability, and social validity data obtained in the study are analyzed.

Analysis of effectiveness data. The data of teaching reading comprehension to students with learning disabilities using the Understand-Answer Strategy were shown with a line graph and the data were analyzed visually. Figure 1 below shows the number of sessions on the horizontal axis and the number of correct answers on the vertical axis. While analyzing the data on reading comprehension skills, the level of the data obtained at the baseline level was compared with the level of the data obtained at the end of the instructional practices. According to the baseline level, the increase in the level of data at the end of the implementation of the independent variable revealed the effect of the applied strategy.

Analysis of reliability data. In this study, 2 reliability data were collected. These are inter-observer reliability data and implementation reliability data. In the following section, the analysis of the inter-observer reliability data and the analysis of the implementation reliability data will be presented.

Analysis of inter-rater reliability data. Inter-observer reliability was calculated by multiplying the number obtained by dividing the total agreement of the researcher and the observer by the sum of the agreement and disagreement by 100 (House, House & Campbell, 1981). The coefficient of the inter-rater reliability data obtained was found to be approximately 90%.

Analysis of implementation fidelity data. Implementation reliability data were generated by observing the videos recorded by the computer with video and audio for the baseline, post-instruction, follow-up, and generalization sessions. First of all, the observer was informed about how to use the reliability forms. Implementation reliability was obtained by calculating the percentage of the observer's practitioner behaviors divided by the planned practitioner behaviors (Billingsley, White & Munson, 1980). Implementation reliability data was found to be 95%.

Analysis of social validity data. The data obtained from the Student and Family Social Validity questionnaires were analyzed qualitatively and the data obtained as a result of the analysis were interpreted in the findings section.

FINDINGS

The baseline level, post-instruction, and follow-up findings regarding the subjects' levels of answering reading comprehension questions by reading narrative texts are shown in Figure 1.

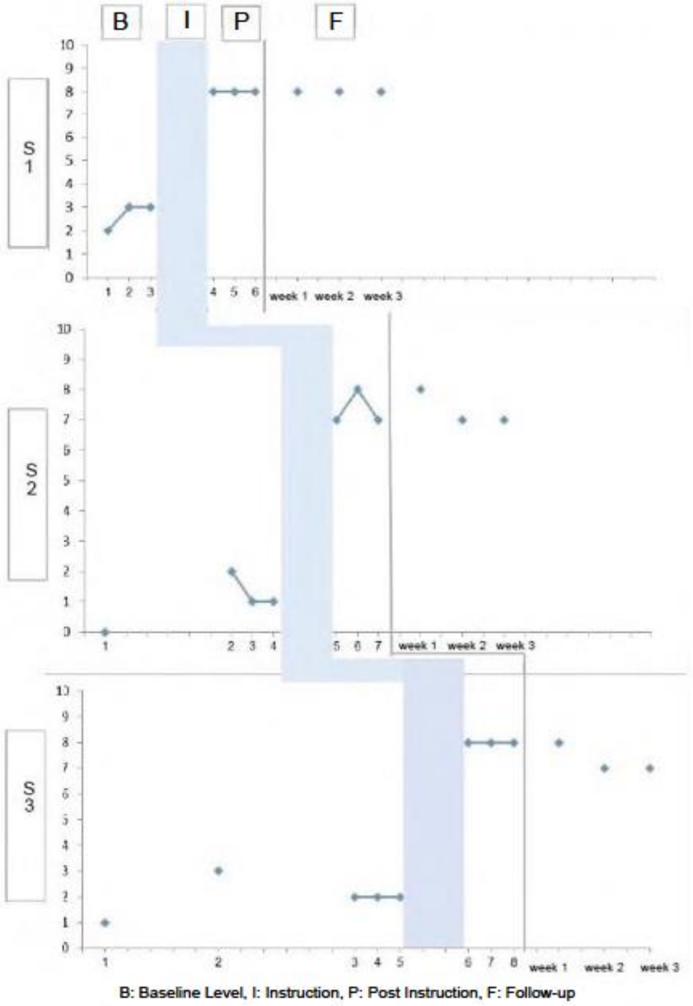

Figure 1. *Baseline level post-instruction, and follow-up findings regarding the subjects' levels of answering reading comprehension questions by reading narrative texts*

The first subject, at the baseline level, answered at least 2 and at most 3 correct answers to the 8-question text exercises, which included answering reading comprehension questions by reading narrative texts in three consecutive sessions. After the Understand-Answer Strategy instruction, he answered all 8 questions correctly.

The second subject, at the baseline level, answered at least 0 and at most 2 questions correctly in the 8-question text exercises involving answering reading comprehension questions by reading narrative texts for four consecutive sessions. The baseline data taken at the beginning of the experimental period and the baseline data taken before the instruction did not differ. After the Understand-Answer Strategy instruction, the students answered at least 7 and at most 8 questions correctly.

The third subject, at the baseline level, answered at least 1 and at most 3 questions correctly in the 8-question text studies, which included answering reading comprehension questions by reading narrative texts for five consecutive sessions. The baseline data taken intermittently and the baseline data taken before the instruction did not differ. After the Understand-Answer Strategy instruction, he answered all 8 questions correctly and answered all questions correctly.

As a result, there is a difference between the baseline level and the number of correct answers given by all three subjects in the 8-question text studies involving answering reading comprehension questions by reading narrative texts after the Understand-Answering Strategy instruction. As seen in Figure 1, the level of the data obtained at the end of the instruction was higher than the baseline level in all subjects. All three subjects met the 80% accuracy criterion at the end of the instruction. This progress was not observed before the implementation of the independent variable but after the implementation of the independent variable. Therefore, the Understand-Answer Strategy was found to be effective in teaching the subjects to answer reading comprehension questions by reading narrative texts.

Findings and Interpretation of the Effect of Understand-Answer Strategy Instruction on the Reading Comprehension Skills of Students with Learning Disabilities after 1, 3, and 5 Weeks

Follow-up sessions were conducted one, three, and five weeks after the end of the studies on answering reading comprehension questions by reading narrative texts with the Understand-Answer Strategy instruction to determine whether the student’s ability to answer reading comprehension questions was retained.

The first subject answered 8, 8, and 8 text questions correctly after one week, three weeks, and five weeks, respectively, in the follow-up sessions held after the instruction. There was no decrease in the reading comprehension questions answered by the subject in the follow-up sessions compared to the end of the instruction.

The second subject answered 8, 7, and 7 text questions correctly after one week, three weeks, and five weeks, respectively, in the follow-up sessions after the instruction.

The third subject answered 8, 7, and 7 text questions correctly after one week, three weeks, and five weeks, respectively, in the follow-up sessions conducted after the instruction.

Findings and Interpretation of the Generalization of the Understand-Answer Strategy to Different Participants by Students with Learning Disabilities

Generalization sessions were organized in order to determine whether students with learning disabilities could perform these skills with different participants in the studies to improve their reading comprehension skills with Understand-Answering Strategy instruction. In the generalization session of this study, the pretest-posttest method was used. The findings related to the generalization sessions organized with different participants and in different environments are given in the following section. The findings related to the generalization session are presented in Figure 2.

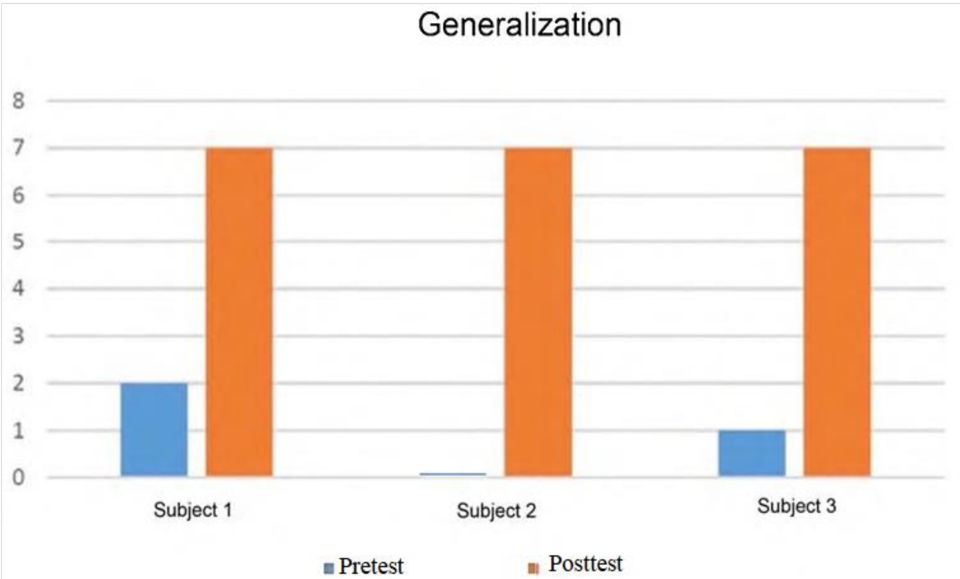

Figure 2. Generalization data of subject 1, subject 2 and subject 3

When Figure 2 is examined, it is seen that when different participants were given the instruction to read the text in front of the subjects and answer the questions, all three of the subjects performed 87.5% in answering the reading comprehension questions correctly using the Understand-Answer Strategy.

Findings and Interpretation of Students' Opinions Regarding Understand-Answer Strategy Instruction

In order to determine the social validity of this study, the "Social Validity Student Questionnaire" was administered to the subjects at the end of the teaching activities. The opinions of the subjects about "Understand-Answer" are presented below.

Table 4. *Students' responses to the items in the social validity questionnaire*

Articles	Never	Sometimes	Always
1) The Understand-Answer Strategy helps me answer Reading Comprehension questions			3
2) From now on, I will use the Understand-Answer Strategy when answering texts in Turkish lessons			3
3) The Understand-Answer Strategy was very easy to use			3
4) I had a lot of fun learning how to use the Understand-Answer Strategy		1	2
5) I liked the worksheets we used while learning the Understand-Answer Strategy			3
6) Understand-Answer Strategy teaching lessons helped me to understand the strategy easily		1	2
7) I had a lot of fun using the steps in the Understand-Answer Strategy		2	1
8) The steps in the Understand-Answer Strategy helped me a lot in answering Reading Comprehension questions		1	2
9) Thinking aloud while practicing the Understand-Answer Strategy was very useful for me			3
10) I recommend the Understand-Answer Strategy to my friends who have difficulty answering Reading Comprehension questions			3

Findings and Interpretations Regarding the Opinions of Families on Understand-Answer Strategy Instruction

In order to determine the social validity of this study, the "Family Social Validity Questionnaire" was administered to the families at the end of the teaching activities. The opinions of the families about "Understand-Answer" are presented below.

Table 5. *Families' reactions to the items in the social validity questionnaire*

Articles	Never	Rarely	Sometimes	Usually	Always
1) My child completes the Reading Comprehension tasks by reading the narrative texts I have assigned and answering the Reading Comprehension questions				1	2
2) My child asks for less help from me when answering Reading Comprehension questions				2	1
3) My child took less time to answer Reading Comprehension questions				1	2

DISCUSSION, CONCLUSION, RECOMMENDATIONS

This study investigated whether the Understand-Answer Strategy is effective on the reading comprehension skills of students with learning disabilities. The first finding of the study demonstrated that the Comprehension-Answering Strategy is effective on the reading comprehension skills of students with learning disabilities. An increase was observed in the number of correct answers to the reading comprehension questions of the narrative texts in all subjects.

The Understand-Answer Strategy includes seven steps. One of these steps is "Solve It!" which involves the effect of adaptations from the Solve It! strategy steps. These are Read, Explain, Visualize, Visualize, Theorize, Assume, Calculate, Check (Montague, 1992). While modifield the Understand-Answer Strategy, 3 steps were removed from the Solve It! Strategy, 3 steps were removed. These steps are 'Visualize', which is used to create a picture or a diagram, 'Theorize', which is used to use a plan to solve the problem, and 'Assume', which is used to make a rough estimate of the answers. The reason for removing these steps is to replace them with one each of the pre-reading, during-reading, and post-reading strategy steps to form the Understand-Answer Strategy, which has a total of 7 strategy steps.

The first step of the Understand-Answer Strategy is the 'Comment' step. The process of reading comprehension involves certain stages in itself. Interpretation skill is required to grasp the meaning. Interpretation refers to the individual's expression and explanation with his/her own words and sentences (Güneş, 2014). In this step, students were expected to comment on the title of the text and the pictures in the reading passage with their own sentences. Predicting is a strategy based on making predictions about what will happen in a text or text section by utilizing various activities before reading a text or text section in general (Palincsar & Brown, 1984). In the Understand-Answer Strategy, the 'Guess' step was added and students were allowed to make predictions by talking to themselves about the questions that might come about the text after making comments. Note-taking is an important strategy used to activate the reader in informative texts. This strategy allows the reader to pay attention to the message the author wants to convey and at the same time to evaluate what information is important and should be recorded (Carnine et al., 1996). The 'Note-taking' strategy was added to the Understand-Answer Strategy to create clues with words. Solve It! The name of the Calculate step in the Solve It! strategy was changed and used in the Understand-Answer Strategy as Answering Questions. When the result of the finding that the comprehension strategy was effective in teaching the subjects who participated in the study to answer reading comprehension questions by reading narrative texts is considered, it is understood that these adaptations were effective.

In the Understand-Answer Strategy, as in the Solve It! Strategy, Say, Ask, and Check' metacognitive strategies were used. In this study, self-monitoring, one of the self-regulation strategies, was used as a metacognitive strategy. Self-monitoring helps students to follow the strategy steps accurately and completely and to follow which task to do in which step while solving problems and thus to control themselves (Montague, 2007). With the help of the Understand-Answer Strategy Tracing Sheet, students were able to follow the strategy steps easily. Putting + after each step helped them see the steps performed and learn the strategy steps. Thus, they were able to monitor, control, and evaluate themselves.

In addition, after the implementation of the Understand-Answering Strategy, students started to make much better comments during the teaching process compared to the beginning. Their prediction skills improved. They started to underline important words while reading narrative texts. After reading the narrative text, they started to explain the text in their own words. They gained writing skills by taking short notes on the text paper and the question paper with important information. At the baseline level, the subjects did not feel the need to check or go back after reading the text and answering the questions, but after the end of the instruction, they started to check all the questions. If there were any questions that they thought were missing or incorrect, they learned to go back to the text and find the correct answers.

In the "Activating Prior Knowledge" stage of self-regulation instruction, students were taught what the important words in the narrative texts might be and how to underline keywords. In the "Discussing the Strategy" stage, students were taught what to do in which step, the purpose and importance of the strategy, the strategy stages and steps, and what the tracing sheet is for. Then, the strategy steps were presented to the students through modeling, guided, and independent practice stages. As stated in the literature, in the "Modeling, Guided Implementation, Independent Implementation" stages, the teacher's modeling of the applied strategy steps, gradually reducing the teacher's guidance and asking students to implement the strategy independently, and the criterion-based nature of these stages play a role in students' becoming independent in the implementation of strategy steps (Case et al, 1992; Cassel & Reid, 1996; Karabulut & Özmen, 2018; Karabulut et al., 2021; Karabulut & Baran, 2021; Montague, 2008; Montague & Dietz, 2009).

The presentation of the Understand-Answer Strategy according to the stages of the Self-Regulation Strategy Development Approach enabled students with learning difficulties to internalize the strategy. In this way, it is thought to have a role in increasing their correct answers to reading comprehension questions. In addition, in the Understand-Answer Strategy, the subjects were given the Understand-Answer Strategy Monitoring Sheet as support in cognitive strategy instruction in order to internalize self-instruction and become independent in the strategy. The Understand-Answer Strategy Monitoring Sheet helped the students to monitor themselves and learn the strategy steps by marking the steps they went through while reading the narrative text and answering the questions.

The second finding of the study was that the Understand-Answer Strategy maintained its effect on the reading comprehension skills of students with learning disabilities after 1, 3, and 5 weeks. The first subject achieved 100% success by answering 8 questions correctly in all three follow-up sessions. The second subject achieved 91.6% success by answering 8, 7 and 7 questions correctly in the three follow-up sessions, respectively. The third subject achieved 91.6% success by answering 8, 7, 7 questions correctly in the three follow-up sessions. Thus, the studies conducted to ensure retention are consistent with the retention findings of other studies conducted with strategy teaching (Coşgun Başar, 2019; Doğanay Bilgi, 2009; Fırat, 2017; Güldenoğlu & Kargın, 2012; Özbek, 2019; Vural, 2019).

In addition, the adapted Solve It! Strategy, which is used in problem-solving skills organized from the Adaptive Solve It! Strategy is also consistent with the retention data (Karabulut & Özmen, 2018). The Understand-Answer Strategy may have been effective in ensuring retention in the self-regulation strategy development approach offered in the teaching process for students with learning disabilities to read the reading passage and answer the reading comprehension questions.

The third finding of the study was that students with learning disabilities generalized the Understand-Answer Strategy to different participants. In the generalization session conducted online with the special education teacher at the school where the students were educated, all three subjects answered 7 questions correctly and achieved 87.5% success. The findings obtained are similar to the generalization findings of Case et al.'s (1992) research on students with learning disabilities using cognitive strategies.

Although it was aimed to generalize to different environments and different text types before the implementation process started, COVID-19, which affected the world, caused a break in face-to-face education, and the goals for generalization to different environments and different types of texts could not be realized due to the closure measures during the implementation process. It is considered important to generalize the Understand-Answer Strategy created for reading comprehension to other text types, so this situation is seen as one of the limitations of the research.

The fourth finding of the study is that the students expressed positive opinions after the training provided with the Understand-Answer Strategy. The subjects stated that the Understand-Answer Strategy helped them while answering reading comprehension questions, that they would use this strategy while answering reading comprehension questions from now on, that it was very easy to use the Understand-Answer Strategy, that they had fun while learning the strategy, and that they liked the worksheets used in teaching, They stated that the strategy teaching lessons enabled them to learn the strategy easily, that they had a lot of fun while using the strategy steps and that the steps were very helpful, that thinking aloud while applying the strategy was very useful for them, and finally that they would recommend the Understand-Answer Strategy to their friends who had difficulty in reading comprehension. These findings show that strategy instruction is not only effective for students with learning disabilities who participated in the study but also positive in terms of social validity.

The last finding of the study was that after the training with the Understand-Answer Strategy, the mothers of three of the subjects responded positively to the survey questions. The parents of the subjects stated that their children asked for less help with reading comprehension questions while doing text studies, that their children's time to answer reading comprehension questions was shorter, and that they completed their homework when they assigned text studies to their children. In addition, one of the mothers said that they would definitely like to participate if further research is conducted. These findings show that strategy instruction was effective for the students with learning disabilities who participated in the study and that the opinions of the families were positive in terms of social validity.

The study's findings suggest that teachers working with students with learning disabilities should employ multi-component strategies that encompass pre-reading and post-reading activities. Additionally, teachers should utilize the Understand-Answer Strategy demonstrated in this study, and model their reading comprehension instruction through thinking aloud and employing supports tailored to the nature of cognitive strategy instruction. The Understand-Answer Strategy can be tested in further studies with different subject groups, with different types of texts, in the form of small-group teaching.

As a result, this study showed that students with learning disabilities learning the steps and stages of the Understand-Answer Strategy with the Self-Regulation Strategy Development Approach was effective in the subjects' correct use of the necessary strategies while reading narrative texts and their correct answers to reading comprehension questions. The follow-up sessions conducted 1, 3, and 5 weeks after the end of the instruction revealed that they maintained their reading comprehension performances and generalized their performances to different practitioners. The interviews also indicated that the students' and parents' opinions about the Understand-Answer Strategy were promising.

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GENİŞLETİLMİŞ ÖZET

Giriş: Okuma, insan yaşamını daha anlamlı hale getirmek için akademik becerilerin temelinde olan bir ön koşul olarak düşünülmektedir (Özdemir ve Baş, 2019). Okuma, ön bilgilerin harekete geçirildiği okuma parçasını yazan ve bu metni okuyan arasındaki etkin iletişime bağlı, doğru bir teknik ve hedef ışığında, belirli bir ortamda meydana gelen anlam kurma süreci olarak tanımlamıştır (Akyol, 2017). Okuduğunu anlama becerisi sadece normal gelişim gösteren öğrenciler için değil özel gereksinimli öğrenciler içinde büyük bir önem ifade etmektedir (Eripek, 1987). Özel gereksinimli bireyler arasında öğrenme güçlüğü olan bireyler sayıca en fazla olan gruptur (Ulutaş vd., 2020). Öğrenme güçlüğü olan öğrencilerin karşılaştıkları çoğu zorluğun sebebi okuduğunu anlama becerilerine yeteri kadar sahip olmamalarıdır (Akçamete, 2015). Okuduğunu anlamaya yardımcı olan ve öğrencilerin akademik başarılarının artmasına yardımcı olan en önemli etmen okuduğunu anlama stratejileridir (Balcı ve Dündar, 2017). Uluslararası alanyazında bütüncül bakış açısıyla desenlenen çok sayıda araştırmaya rastlanılırken (Idol ve Croll, 1987; Mastropieri ve Malone, 1991; Salembier, 1999) ulusal alanyazında sınırlı sayıda araştırma bulunmaktadır (Fırat ve Ergül 2020; Tülü vd., 2021). Alanyazın incelendiğinde çevrimiçi yapılan araştırmaların sınırlılığı hem de hem de bütüncül bakış açısını içeren araştırmaların sınırlılığı böyle bir araştırmaya gereksinim oluşturmuştur. Bu araştırmada öğrenme güçlüğü olan ortaokul öğrencilerin okuduğunu anlama becerilerini geliştirmesi hedeflenmiş ve öğrenme güçlüğü olan ortaokul öğrencilerine okuduğunu anlama becerilerini kazandırmak için bütüncül bir bakış açısıyla hazırlanan ve çevrimiçi sunulan Anla-Cevapla Stratejisi'nin etkililiği araştırılmıştır. Bu genel amaç doğrultusunda; Anla-Cevapla Stratejisi öğrenme güçlüğü olan öğrencilerin okuduğunu anlama becerileri üzerinde etkisine, okuduğunu anlama becerileri üzerindeki etkisini 1, 3 ve 5 hafta sonra sürdürmesine, farklı uygulamacılara genellemesine ve stratejiye ilişkin öğrenci ve öğretmen görüşlerine bakılmıştır.

Yöntem: Bu araştırmada tek denekli araştırma yöntemlerinden denekler arası çoklu yoklama modeli kullanılmıştır. Araştırmanın bağımlı değişkeni; öyküleyici metinlere ilişkin okuduğunu anlama sorularına verilen doğru cevap sayısıdır. Bağımsız değişkeni ise Anla-Cevapla Stratejisi öğretim paketidir. Araştırmaya İstanbul ili Pendik ilçesinde bulunan ortaokul sınıflarında kaynaştırma programına dahil edilen öğrenme güçlüğü tanılı üç öğrenci katılmıştır. Denekler a) Dakikada en az 80 kelime okuyan, b) Ortaokul 6. ve 7. sınıfına devam eden, c) Çevrimiçi programlarda düzenli olarak derse katılım sağlayan öğrenciler arasından seçilmiştir. Öğrenme güçlüğü olan öğrencilerin okuduğunu anlama becerilerini geliştirmek için kullanılan Anla-Cevapla Stratejisi bilişsel ve üstbilişsel öğeleri olan stratejilerden Bunu Çöz! (Solve It!) Stratejisinden uyarlanmıştır. Bunu Çöz! Stratejisi matematik problemlerini çözmede etkili bir stratejidir (Chung ve Tam, 2005; Montague, 2000; Karabulut, 2015; Karabulut ve Özmen, 2018). Bu araştırmada kullanılan öyküleyici metinler özel eğitim alanında birçok bilimsel araştırma yapmış ve eğitim setleri hazırlamış olan Prof. Dr. Emine Rüya ÖZMEN'in Ya-Pa Yayınlarında çıkarmış olduğu Okuduğunu Anlama Setlerinden seçilmiştir. Öğrenme güçlüğü olan öğrencilere Anla-Cevapla Stratejisi'yle okuduğunu anlama becerilerini geliştirmek için her denekte başlama düzeyi oturumları, öğretim oturumları ve anla, izleme ve genelleme oturumları düzenlenmiştir. Öğrenme güçlüğü olan öğrencilere Anla-Cevapla Stratejisi'yle okuduğunu anlama becerilerini geliştirmek için her denekte başlama düzeyi oturumları, öğretim oturumları, izleme ve genelleme oturumları düzenlenmiştir. Bu araştırmada etkililik, güvenirlilik verileri ve sosyal geçerlilik verileri toplanmıştır. Elde edilen veriler etkililik, güvenirlik ve sosyal geçerlilik başlıkları altında analiz edilmiştir.

Bulgular: Araştırmaya katılan deneklerin üçününde başlama düzeyi ile Anla-Cevapla Stratejisi öğretimi sonrasında öyküleyici metinlerin okuyarak okuduğunu anlama sorularını cevaplama içeren 8 soruluk metin çalışmalarında verdiği doğru cevap sayılarında fark bulunmaktadır. Üç denek de öğretim sonunda belirlenen %80 doğruluk ölçütünü karşılamıştır. Bu nedenle, araştırmaya katılan deneklerin öyküleyici metinleri okuyarak okuduğunu anlama sorularını cevaplama öğretiminde Anla-Cevapla Stratejisi etkili bulunmuştur. Anla-Cevapla Stratejisi öğretimi ile öyküleyici metinlerin okuyarak okuduğunu anlama sorularını cevaplama çalışmaları bittikten 1, 3 ve 5 hafta sonra öğrencinin, okuduğunu anlama sorularını cevaplama becerisine ilişkin kalıcılığın sağlanıp sağlanmadığını belirlemek için izleme oturumları yapılmıştır. Deneklerin üçününde 1, 3 ve 5 hafta sonra öğretim sonuna göre izleme oturumlarında cevapladıkları okuduğunu anlama sorularında bir azalma olmamıştır. Öğrenme güçlüğü olan öğrencilerin Anla-Cevapla Stratejisi öğretimi ile okuduğunu anlama becerilerinin geliştirilmesi çalışmalarında bu becerileri farklı katılımcılarla gerçekleştirip gerçekleştiremeyeceklerini belirlemek amacıyla genelleme oturumları düzenlenmiştir. Yürütülen bu çalışmanın genelleme oturumunda, öntest- sontest yöntemi kullanarak gerçekleştirilmiştir. Farklı katılımcının deneklere önündeki metni oku ve soruları cevapla yönergesi verildiğinde Anla-Cevapla Stratejisini kullanarak okuduğunu anlama sorularını doğru cevaplamada deneklerin üçününde performansları %87.5 olarak gerçekleştirdikleri görülmüştür. Sosyal geçerlilik verilerini incelemek için yapılan öğrenci ve veli görüşmeleri Tablo 4 ve Tablo 5'te verilmiş olup Anla-Cevapla Stratejiyle alakalı olumlu görüşler geliştirdikleri görülmüştür.

Sonuç, Tartışma ve Öneriler: Bu araştırma öğrenme güçlüğü olan öğrencilerin Kendini Düzenleme Stratejisi Gelişimi Yaklaşımıyla Anla-Cevapla Stratejisi basamak ve aşamalarını öğrenmelerini, deneklerin öyküleyici metinleri okurken gereken stratejileri doğru şekilde kullanmaları ve okuduğunu anlama sorularına doğru cevaplamalarında etkili olduğunu göstermiştir. Öğretim bittikten 1, 3 ve 5 hafta sonra yapılan izleme oturumlarında okuduğunu anlama performanslarını sürdürdükleri ve farklı uygulamacılara performanslarını genellediklerini göstermiştir. Yapılan görüşmelerde Anla-Cevapla Stratejisi ile ilgili öğrenci ve aile görüşlerinin olumlu olduğunu gösterir niteliktedir. Araştırma bulguları doğrultusunda öğrenme güçlüğü olan öğrencilerle çalışan öğretmenlere okuma öncesi anı ve sonrasını içeren çok ögeli stratejileri kullanmaları, okuduğunu anlama öğretimlerinde bilişsel strateji öğretimin doğasına uygun olan yüksek sesle düşünme ve destekleyiciler kullanarak model olmaları önerilebilir. Anla-evapla Stratejisi farklı denek gruplarına farklı tür metinlere, küçük grup öğretimi şeklinde ileri araştırmalarda denenebilir.

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Opinions of Mathematics Teachers on Measurement and Evaluation[1]

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ABSTRACT

The purpose of this study is to examine the opinions of mathematics teachers comprehensively about measurement and evaluation. The study was conducted as a case study. The study group consists of 15 volunteer mathematics teachers working in schools in various regions of Turkey in the 2021–2022 academic year. A semi-structured interview method was used to collect research data, and a content analysis technique was used to analyze the data. The results of the study showed that mathematics teachers do not have enough information about the purposes of measurement and evaluation, and they generally think product-oriented. It was determined that teachers mostly use multiple-choice and open-ended questions in written exams and they care most about in-class participation and homework while giving performance grades. Also, it was concluded that the teachers paid attention to one or a few issues in the evaluation of the project assignments and could not complete the evaluation. It was determined that mathematics teachers used traditional measurement and evaluation techniques and did not have adequate knowledge about alternative measurement and evaluation techniques. Based on the results obtained of the study, various suggestions were made to practitioners and researchers.

Matematik Öğretmenlerinin Ölçme ve Değerlendirmeye İlişkin Görüşleri

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ÖZ

Bu araştırmanın amacı matematik öğretmenlerinin matematik derslerinde ölçme ve değerlendirmeye ilişkin görüşlerini kapsamlı bir şekilde incelemektir. Araştırma durum çalışması olarak yürütülmüştür. Araştırmanın çalışma grubunu 2021-2022 eğitim-öğretim yılında Türkiye'nin çeşitli bölgelerindeki okullarda görev yapan 15 gönüllü matematik öğretmeni oluşturmaktadır. Araştırma verilerinin toplanmasında yarı yapılandırılmış görüşme yöntemi kullanılmıştır. Veriler içerik analizi tekniği kullanılarak analiz edilmiştir. Araştırmanın sonuçları matematik öğretmenlerinin ölçme ve değerlendirmenin amaçları konusunda yeterli bilgiye sahip olmadıklarını ve genel olarak ürün odaklı düşündüklerini göstermiştir. Öğretmenlerin yazılı sınavlarda çoğunlukla çoktan seçmeli sorular ve açık uçlu sorular kullandıkları, performans notlarını verirken en çok ders içi katılım durumuna ve ödevlere önem verdikleri belirlenmiştir. Ek olarak öğretmenlerin proje ödevlerini değerlendirirken bir veya birkaç konuya dikkat ettikleri ve değerlendirmeyi tam olarak yapamadıkları sonucuna ulaşılmıştır. Matematik öğretmenlerinin geleneksel ölçme ve değerlendirme tekniklerini kullandıkları, alternatif ölçme ve değerlendirme teknikleri konusunda ise yeterli bilgiye sahip olmadıkları araştırmanın sonuçları arasındadır. Araştırmada ulaşılan sonuçlara dayalı olarak uygulayıcılara ve araştırmacılara çeşitli önerilerde bulunulmuştur.

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INTRODUCTION

Today, education has a very important place. Education is the most effective tool for the development, and progress of nations and for educating people. Therefore, it is difficult to shape the future of a nation without education. The main purpose of education is to create a behavioral change in the person in the desired direction and to reintegrate the person into society (Ertürk, 1982). It is necessary to achieve this goal of education and to determine the behavioral change that occurs in students. Whether the students acquire the desired behaviors or not, and if they do, their level of achievement and direction are determined by the measurement and evaluation process (Bayram, 2011). Education is an interactive process consisting of learning, teaching and measurement-evaluation elements (Özalp & Kaymakcı, 2022). The success of education depends on the efficiency of this process. Measurement and evaluation, which is an important element of education, is very important in determining where students are in terms of developments in line with the specific objectives of the course (Özçelik, 2010) and in determining whether students have gained the expected characteristics of education in the process (Atılgan, 2011) because measurement and evaluation ensure that the decisions made about students' success, guidance, effectiveness of programs, and the teaching process are accurate (Yaşar, 2008). Additionally, accurate assessment and evaluation help teachers make informed instructional decisions and provide targeted support in a timely manner (Black & Wiliam, 1998b; Perrenoud 1998; Ramaprasad, 1983; Sadler, 1989). Therefore, measurement and evaluation are integral parts of the teaching process (Heritage, 2007). In this context, it is very important for both researchers and instructors to understand measurement and evaluation correctly.

Examining the literature, we can encounter different definitions of measurement and evaluation. However, when the common and basic features of measurement definitions are examined, measurement means observing any object or feature and expressing the observation results with numbers or symbols (Turgut, 1986); determining the degree of possession of a quality (Gullo, 2005); and collecting information about the development process (McAfee & Leong, 2012). Evaluation is the process of reaching a value judgment and a conclusion by comparing measurement results with a criterion belonging to the same branch (Yılmaz, 1986). In other words, measurement can be described as collecting information about children's development, learning, and educational activities and making decisions based on this information (McAfee et al., 2004). The subjects of evaluation in education are the success of the student, the goals and behaviors of the program, the effectiveness of the teaching, measurement, and evaluation, and the placement of the students in the appropriate programs (Baykul, 1992). Measurement and evaluation is a feedback mechanism used to learn about student learning and inform stakeholders about the impressiveness of education (Yaman & Karamustafaoğlu, 2011). Also, continuous observation of the education and training process with measurement and evaluation provides the opportunity to identify and correct the problems that occur at every step (MoNE, 2009).

The quality of measurement and evaluation practices in education largely depends on teachers' knowledge, experience, and competencies in this field. Therefore, it is necessary for teachers to have adequate and necessary training in measurement and evaluation and to be able to use this knowledge effectively (Erdemir, 2007). Teachers who can apply this process as desired will have the opportunity to see the capacities of their students and to work on the deficiencies of the teaching process (Birgin & Gürbüz, 2008). Teachers should know the purposes of measurement and evaluation, be able to measure and evaluate as often as necessary and have adequate knowledge about which methods and techniques to use. Besides, teachers are expected not only to be limited to traditional measurement and evaluation methods but also to have knowledge about the alternatives because the constructivist approach strongly affects the measurement and evaluation processes suggested by the curriculum (Fourie & Van Niekerk, 2001). While traditional measurement and evaluation methods are separate from the teaching process and product-oriented, alternative evaluation is process-oriented.

Traditional measurement and evaluation are defined as measuring the learning levels of students through techniques such as written exams, tests, and oral exams used at all levels of education and making decisions based on the results (Bahar et al., 2006). Examples include multiple-choice tests, true-false, matching and fill-in-the-blank tests, short-answer and long-answer written probes, and oral probes. In traditional evaluation, learning products are mostly evaluated (Genç, 2005), so it is a product-oriented evaluation method. Alternative assessments, on the other hand, take more into account the teaching process and also provide more information about students' success. In addition, it is effective in increasing students' active participation in the lesson and is a type of evaluation that allows them to understand the subjects in detail (Stiggins, 1994; Svinicki, 2004). Alternative (supplementary) evaluation, which takes into account the evaluation of the product along with the process, provides the opportunity to evaluate students' higher-level thinking skills, problem-solving skills, and creativity (Fidan & Sak, 2012). Project and portfolio studies, evaluations with rubrics, concept maps, Vee diagrams, self and peer evaluations, observation, interviews, etc. can be given as examples of alternative evaluation techniques (Genç, 2005). Alternative (supplementary) evaluation is very important in order to evaluate the process as well as the product obtained as a result of education and training because evaluating the student's experiences during the learning process is also very valuable.

Formative evaluation, which is a process-oriented evaluation, can be explained as providing feedback and correction throughout the learning-teaching process (Bloom, 1969; cited by Bennett, 2011). This evaluation can be defined as evaluating student development during teaching, revealing learning deficiencies and needs, providing feedback, and rearranging the teaching appropriately (Ertürk, 1982; Yalaki, 2010). Formative assessment, which does not have the purpose of grading, is carried out at the beginning and throughout the teaching period to support learning and eliminate learning deficiencies (Black & Wiliam, 1998a; Sadler, 1998). Studies have shown that formative assessment positively affects students' learning and motivation (Black & Wiliam, 1998a; Ökten, 2009).

The measurement and evaluation process, which is an important part of the education process, is also very important in mathematics education because mathematics education in the education system has a very important place in industry, technology, and other areas of daily life, even working in the field of mathematics in the training of scientists. The need for mathematics in education and the universality of the language of mathematics are inevitable factors in the development of the information society (Yıldız & Uyanık, 2004). As in the entire education system, measurement and evaluation are of great importance in mathematics education. Since measurement activity and evaluation methods used directly affect the process, it is thought that an effective measurement and evaluation process will increase the quality of teaching (Şimşek et al., 2017). Structuring the learning process by using formative assessment types, especially in mathematics courses where student success is low, can also increase the quality of teaching. There are studies in the literature indicating that formative assessment has positive effects on success, attitude, and remembering what has been learned in mathematics lessons (Tekin 2010b, Tempelaar et al., 2012). In addition, formative assessment contributes to the development of students' metacognitive awareness as it gives them the opportunity to evaluate themselves and monitor their individual development (Jones, 2007). It is also known that metacognitive awareness has a significant effect on mathematics achievement (Schneider & Artelt, 2010).

Assessment, which is an integral part of mathematics teaching, provides deep and qualified learning when integrated into the entire teaching process (Şimşek et al., 2017). Lack of formative evaluation, especially in courses such as mathematics, where prerequisite relationships must be learned, makes it difficult for students who have not acquired the knowledge and skills at the lower levels to acquire the behaviors at the upper levels (Tekin, 2010a). In addition, formative evaluation enables students to reveal their misconceptions (McIntosh, 1997; Wiliam, 1999). By knowing the mathematical concepts that students have intense difficulty with, teachers can determine how to evaluate them and how students who have difficulty should be supported when planning classroom activities (National Council of Teachers of Mathematics [NCTM], 2000). In this context, the importance of formative assessment in mathematics lessons is quite clear.

Using formative tests in mathematics lessons, how students understand concepts, how they apply rules and formulas, and how they structure solutions can be examined, and mathematical misconceptions that students have can be identified (Mevarech, 1983). As a result of these tests, students are given feedback, additional activities are carried out, and the process can be redesigned in line with the feedback (Tekin, 2010a). Such assessments are used continuously throughout the mathematics learning and teaching process, allowing individual students to be monitored (Baki, 2008). Similarly, Black and Wiliam (2010) emphasized the importance of using short tests frequently. Therefore, in the process of learning and teaching mathematics, formative assessment can be used to identify areas of difficulty in learning, learning deficiencies, and mislearning.

In the literature review, it was seen that there are studies on measurement and evaluation in mathematics. Önel et al. (2020) examined secondary school mathematics teachers' awareness of alternative evaluation methods. In a similar study (Karakuş, 2010), teachers' opinions on measurement and evaluation approaches in the new secondary school mathematics curriculum were examined. On the other hand, Baştürk and Dönmez (2011) examined teacher candidates' knowledge of measurement and evaluation on the subject of limit and continuity. Toptaş (2011) investigated primary school teachers' sense of the use of alternative measurement and evaluation methods in mathematics lessons. It was seen that the limited number of studies on measurement and evaluation in mathematics lessons generally focus on alternative measurement and evaluation methods. The absence of a study that comprehensively examines how measurement and evaluation should be used in mathematics lessons shows the gap in the literature. Mathematics is a course that has always been emphasized from the past to the present and has often taken place as a subject of research. It is a necessity to investigate the measurement and evaluation sides of such an important course.

Purpose of the Research

Measurement and evaluation are critical parts of the education and training process. An educational process without measurement and evaluation is unthinkable. Besides, since mathematics is a cumulative course, it is important that the preliminary acquisitions be fully achieved to learn accurately. For this reason, measurement and evaluation are also important for mathematics in this sense. According to the measurement and evaluation results, it is very important to complete the missing parts and move on to new topics. The aim of this study is to investigate the opinions of mathematics teachers on measurement and evaluation in a comprehensive way. In line with this purpose, an answer to the question “What are the opinions of mathematics teachers about the measurement and evaluation process?” was examined.

METHOD

Research Model

This study, which aims to find out the opinions of mathematics teachers about the measurement and evaluation used in their classes, was conducted as a case study. This model is a research method used to evaluate an event or situation in depth over a certain period. In this method, various data collection tools such as interviews and observations are used to understand, explain and examine the situation in detail (Creswell, 2007). In the study, it was decided that it would be appropriate to structure the research in the case study model since it was aimed at investigating the general opinions of mathematics teachers on the measurement and evaluation they use in their lessons in detail.

Study Group

Convenience sampling was used to determine the research group. This method was preferred for its economy in terms of method, time, money, and labor (Büyüköztürk, 2012). The study group consists of 15 volunteer mathematics teachers working in schools in various regions of Turkey in the 2021–2022 academic year. The demographic structure of the study group and the codes given to the teachers are given in Table 1.

Table 1. *Demographic Characteristics of the Study Group and the Codes Given to the Participants of the Study*

Codes	Gender	Seniority Year	Branch	Education status
M_1	Male	3	S.M.	U.
M_2	Female	6	S.M.	U.
M_3	Female	9	S.M.	P.
M_4	Male	2	S.M.	U.
M_5	Female	5	E.M.	U.
M_6	Male	2	E.M.	P.
M_7	Male	1	E.M.	P.
M_8	Female	4	E.M.	U.
M_9	Female	3	E.M.	U.
M_{10}	Female	2	E.M.	P.
M_{11}	Male	8	S.M.	U.
M_{12}	Male	19	S.M.	U.
M_{13}	Female	15	E.M.	P.
M_{14}	Female	18	E.M.	U.
M_{15}	Male	15	S.M.	P.

Undergraduate: U. Postgraduate: P. Secondary mathematics: S.M. Elementary mathematics: E.M.

The study was conducted with 15 mathematics teachers—eight women and seven men. The participating teachers in the study group were found to have been teaching mathematics for a period ranging from 1 to 19 years. Also, seven of the teachers in the study group teach secondary school mathematics, and eight of them teach elementary school mathematics. Finally, six of the participating teachers received postgraduate education, and nine received undergraduate education. It can be said that the participant teachers showed a homogeneous distribution in terms of the given characteristics. In order to protect the confidentiality of teachers' information, mathematics teachers were coded as M1, M2, M3, ...

Data Collection Tool and Process

Interviewing is a technique that provides in-depth information on a particular topic (Büyüköztürk et.al., 2019). An interview is a two-way communication process designed in the form of asking and answering questions in line with a predetermined purpose (Stewart & Cash, 1985). Interviews can be classified as structured, semi-structured, or unstructured (Türnüklü, 2000). A semi-structured interview method was used to collect the data for the study. In this method, interviews are usually carried out based on an interview form.

Firstly, the literature was reviewed, and an in-depth study was conducted on the interview form. Afterwards, a semi-structured interview form was prepared as a draft by the researchers to be used in the research by taking expert opinions. While preparing the interview form, it was focused on the purposes of measurement and evaluation, how often it is done, question types used, evaluation criteria of project and performance assignments, alternative measurement and evaluation methods, competency and educational status in measurement and evaluation, and measurement and evaluation tools. In order to determine whether the draft interview form is appropriate in terms of scope and clarity, the opinions of two mathematics education experts experienced in measurement and evaluation were taken. The language suitability of the draft form was examined by a linguistics expert. In order to finalize the draft interview form, a final pilot study was done with a mathematics teacher. Finally, an interview form consisting of 10 questions was created. The final version of the form was re-examined by the measurement expert, and approval was obtained.

In semi-structured interviews, questions that are not included in the interview form may also be asked along with the standard specific questions. Various questions were asked in addition to the 10 questions in the form during the interviews in order to obtain more in-depth information from the participants. Interviews with teachers lasted an average of 50 minutes.

Data Analysis

The content analysis technique was used for the data analysis. This analysis is the categorization of the data obtained and the systematic expression of these categories in smaller structures with coding (Büyüköztürk et al., 2019). For this purpose, firstly, the interviews with the participants were transcribed. After the interviews were transcribed, they were sent to all participants via WhatsApp and e-mail and asked if there was anything they found wrong or missing. None of the participants reported any errors or omissions. Then, the analysis of the data was carried out in four stages as stated in the literature (Yıldırım & Şimşek, 2016). The transcribed texts were read separately by the researchers more than once; important sections of the text were identified, and the researchers made sense of the data. So this is the first stage, which is the coding of the data. The second stage is to find themes according to the common characteristics of the codes found. The third stage is making the determined codes and themes ready for interpretation, and the last stage is the interpretation of the findings. In addition, during the analysis process, all data were coded by two more experts in the field of measurement and evaluation. By examining the similarities and differences in the coding made by different people, the reliability of the coding was evaluated, and themes were created after the final edits. Then, by nature of the content analysis, direct quotations were presented to convey the opinions of the participants. In data presentation, relevance to the theme, clarity, and strikingly different view criteria were taken into account for the selection of direct quotations (Ünver et al., 2010).

Validity and Reliability

Various strategies were used to increase the quality of the research. These strategies are "credibility," “transferability,” “consistency,” and “confirmability” (Yıldırım & Şimşek, 2016). In order to ensure the credibility of this study, participant confirmation and expert review methods were used. After the interview data were transcribed, these texts were sent to the participants, who were asked to read and give feedback; thus, participant confirmation was provided. Expert opinions were taken in the formation of the data collection tool. In addition, reliability in qualitative research is based on the accuracy of observation (Büyüköztürk et al., 2019). Qualitative research offers the opportunity to obtain rich and in-depth information through interviews, and reliability is very important for accurate results. Fraenkel and Wallen (2009) make some suggestions in order to prevent situations that may reduce reliability. In the interviews conducted in line with these suggestions, the interview period was kept as long as possible in order to make the participants feel comfortable, and the participants chatted for a while about topics other than the research topic before starting the interview. The interviews were recorded both in writing and audio, and the participants were promised that the audio recordings would be used only by the researcher and for this study. In order to ensure the transferability of the study, a detailed descriptive method was used. The detailed description is the transfer of raw data in a rearranged form according to the generated codes and categories, without adding comments to the reader and remaining faithful to the nature of the data (Yıldırım & Şimşek, 2016). In this context, direct citations from the interviews were inclusive. Braun and Clarke (2013) state that, thanks to detailed descriptions supported by direct quotations, the reader can evaluate the potential of applying the research results to different participants. To ensure the consistency of the study, the interviewer conducted the interviews in the same environment and asked the same questions. To ensure the confirmability of the research, the confirmation of a field expert was obtained for the raw data obtained and the conclusions and interpretations made in line with these data. Also, a consensus among the coders was reached for reliability. In the process, the participants were informed about the study, the confidentiality of the participants was ensured, and their consent was obtained for the recording of the interviews.

Ethics Committee Decision

The study was conducted according to ethical principles. The research was conducted within the framework of ethical principles and with the approval of the decision of "Necmettin Erbakan University Social and Human Sciences Scientific Research Ethics Committee" dated 11.11.2022 and numbered 2022/414.

RESULTS

As a result of the content analysis carried out according to the purpose of the study, it was seen that the data obtained from the teachers' opinions were collected under eight themes.

Teachers' Purposes of Measurement and Evaluation in Mathematics Lessons

The results regarding the teachers' purposes of measurement and evaluation in mathematics lessons are presented in Table 2.

Table 2. *Participant Opinions on the Purposes of Measurement and Evaluation in Mathematics Lessons*

Theme	Codes	Participants
Teachers' Purposes of Measurement and Evaluation in Mathematics Lessons	To determine the level of learning of the acquisitions	M_1, M_2, M_4, M_5, M_7, M_{12}, M_{14}, M_{15}
	To determine the level and check readiness	M_3, M_8, M_{10}
	To see deficiencies and misconceptions	M_6, M_9, M_{11}
	To grade	M_{13}

In Table 2, it was seen that half of the participating teachers stated that they performed measurement and evaluation to determine the learning level of the acquisitions. The statements of these teachers are as follows:

"I perform measurement and evaluation to observe the reflections of goals and achievements on students." (M_2)

"I do it to measure the level of the student's learning." (M_7)

"I perform measurement and evaluation to determine the level of learning of the subjects." (M_{12})

The teachers who expressed their opinions under this code stated that the measurement and evaluation they used to determine the level of learning of the acquisitions served this purpose.

There are participant opinions stating that they carried out measurement and evaluation to determine the level and to check the readiness. The statements of these teachers are as follows:

"To determine the level and teach students according to their level" (M_3)

"I perform measurement and evaluation in order to know the levels and subject levels of the students" (M_8)

Three teachers stated that by performing measurement and evaluation at the beginning of the academic year, they determined the levels of the students and taught according to these levels.

There are statements that measurement and evaluation are carried out in order to determine the deficiencies and misconceptions of the students. The statement of the teacher coded M_9, who expressed her opinion in this way, is as follows:

"To see deficiencies and misconceptions of the students." (M_9)

Finally, the teacher with the code M_{13} stated that he performed the measurement and evaluation in order to grade students. The statement of the teacher is as follows:

"I perform the measurement and evaluation to grade students." (M_{13})

Teachers' Measurement and Evaluation Frequency

The results regarding the teachers' frequency of performing measurement and evaluation are presented in Table 3.

Table 3. *Participant Opinions on the Frequency of Measurement and Evaluation*

Theme	Codes	Participants
Teachers' Measurement and Evaluation Frequency	At the end of the unit	M_1, M_3, M_5, M_8, M_{11}, M_{12}, M_{13} M_{14}, M_{15}
	In written exams	M_7, M_{10}
	In every lesson	M_2, M_6
	1 in 15 days	M_4, M_9

In Table 3, it was seen that more than half of the participants stated that they performed measurement and evaluation at the end of each unit. The statements of these teachers are as follows:

"I do it at the end of each unit." (M_1)

"I perform the measurement and evaluation at the end of the unit." (M_5)

The majority of the participants stated that they determined the missing and inaccurate learnings of the unit by using the measurement and evaluation at the end of each unit.

Two of the participating teachers stated that they performed the measurement and evaluation with written exams.

"I perform the measurement and evaluation with the written exams we do during the year. That is two times in one term." (M_{10})

The fact that the measurement and evaluation of a term can be carried out with only two exams in a semester can be considered a concerning result.

While two teachers stated that they performed the measurement and evaluation in each lesson, two teachers stated that they performed the measurement and evaluation once in 15 days. The opinions of these teachers are as follows:

"I do it in every lesson, but I do not always combine measurement tools and evaluation results with visuals and text." (M_2)

"I perform the measurement and evaluation every two weeks." (M_4)

The teacher with the code M_2 stated that she performed the measurement and evaluation in every lesson; however, she did not always do it in written form, but sometimes with verbal questions or with alternative evaluation methods.

Most Used Question Types in Written Exams

The results regarding the question types most frequently used by teachers in written exams are presented in Table 4. Since the answers given by the participants are related to more than one code, the number of frequencies and the number of participants in the tables vary.

Table 4. *Participant Opinions on the Most Used Types of Questions in Written Exams*

Theme	Codes	Participants
Most Used Question Types in Written Exams	Multiple-choice	M_4, M_6, M_7, M_8, M_9, M_{10}, M_{11}, M_{12}, M_{13}, M_{14}, M_{15}
	Open-ended	M_1, M_2, M_3, M_5, M_7, M_8, M_9, M_{10}, M_{14}
	True-False	M_4, M_{12}, M_{13}

When Table 4 was examined, it was seen that teachers mostly use multiple-choice and open-ended questions in written exams. Also, three teachers stated that they also included true-false questions in their exams in addition to open-ended and multiple-choice questions. Teacher opinions are as follows:

"I generally use an open-ended question style in exams. I think that the mathematics course is more appropriate for measurement and evaluation due to its content. It is easier for me to see what level of skills students have acquired." (M_1)

"Open-ended. Because it allows students to see more clearly where they made mistakes." (M_5)

"To see their open-ended solutions." (M_{14})

Teachers who preferred the open-ended question type stated that the mathematics course was more appropriate due to its structure and they preferred it because it provided the students with the opportunity to see their mistakes.

"I prefer to ask multiple-choice questions together with the optical form to be a preparation for LGS (High School Entrance Exam)." (M_6)

"I use multiple-choice questions for the student to get used to the LGS system." (M_{11})

The teachers who preferred the multiple-choice question type stated that they used this question type in order to prepare their students for the LGS exam.

Two teachers who preferred true-false and multiple-choice questions gave interesting answers.

"Test and true-false. For children to have higher exam grades." (M_4)

"Multiple-choice and true-false. Because there is a possibility that students' fabrications will happen." (M_{13})

M_4 and M_{13} coded teachers stated that they preferred these question types for students to get higher grades. These teachers stated that they work in rural areas and the success level of the students is low, so they prefer such questions in order to get high grades.

Teacher coded M_{12} said that he used all types of multiple-choice, open-ended, true-false questions and he aimed to make the best evaluation by using different question types in measurement. The teacher's statement is as follows:

"Multiple-choice, open-ended, true-false, using different types of measurement to make the best evaluation." (M_{12})

Important Steps in Evaluation of Project Assignments

The results regarding the steps that teachers give importance to in the evaluation of project assignments are presented in Table 5.

Table 5. *Participant Views on the Important Steps in the Evaluation of Project Assignments*

Theme	Codes	Participants
Important Steps in Evaluation of Project Assignments	Time	$M_1, M_5, M_8, M_{13}, M_{14}$
	Scale	$M_2, M_5, M_7, M_{10}, M_{11}$
	Originality	M_1, M_2, M_5
	Communication	M_1
	Content	$M_3, M_4, M_9, M_{12}, M_{15}$
	Attention	$M_3, M_5, M_6, M_8, M_9, M_{13}, M_{15}$

In Table 5, it was seen that the steps that participant teachers give importance to in the evaluation of project assignments. The majority of the participating teachers mentioned more than one issue that they give importance to. The most common answer was the careful preparation of the assignment.

"I care about the criterion that the homework is carefully prepared." (M_6)

"I value attention." (M_9)

What teachers meant by care are elements such as the beauty of writing, page layout, and the pencil used.

Time and scale were other issues that teachers gave importance to in the evaluation of project assignments.

“I care that homework is delivered on time as a criterion.” (M_1)

“I care about homework being delivered on time.” (M_5)

“Time is very important. Every month they should show me what they've done. Homework should not be prepared one day before the day they are due.” (M_8)

While four of the teachers who give importance to time cared about the fact that the homework should be delivered on time, one of them determined the efficient use of time as a criterion.

“I perform the evaluation using the existing scales.” (M_2)

“I apply the project assignment evaluation criteria that I have prepared according to the content of the assignment.” (M_7)

Five teachers stated that they used certain scales while evaluating their project assignments. While some of these teachers stated that they prepared the scales according to the content of the homework, some of them stated that they used ready-made evaluation scales.

The answers given by five teachers were gathered under the content code. As a criterion for the evaluation of the homework, these teachers determined whether the student understood the subject of the homework correctly or not. The teachers' opinions are as follows:

“It is important that they understand the subject of the homework.” (M_4)

“I give question-solution as homework. The criterion is whether they solve these questions correctly or not.” (M_9)

It is an interesting result that the teacher coded M_9 gave question-solution as a project assignment.

Three teachers stated originality and one teacher stated communication as a criterion. The statements of the teachers are as follows:

“I pay attention to originality and communication with me while preparing the project.” (M1)

“Originality is an important criterion.” (M_2)

A notable result under this theme was that the teachers paid attention to one or a few issues in the evaluation of the project assignments and they could not make the evaluation completely.

Important Steps in Giving Performance Grades

The results regarding the steps that teachers give importance to in giving students' performance grades are presented in Table 6.

Table 6. *Participant Opinions on the Important Steps in Giving Performance Grades*

Theme	Codes	Participants
Important Steps in Giving Performance Grades	In-class interest and participation	M_1, M_3, M_4, M_5, M_6, M_8, M_9, M_{10}, M_{12}, M_{13}, M_{15}
	Homework	M_1, M_5, M_8, M_{12}, M_{15}
	Question answer	M_2, M_{14}
	End-of-unit exams	M_{13}, M_{15}
	Scale	M_7, M_{11}

In Table 6, it was seen that teachers gave the most importance to in-class participation and homework while giving performance grades.

“I give performance grades according to their interest and participation in the course, and to what level they cared about the homework given during the term.” (M_1)

"In-class performance, whether or not to do homework. Because students can get excited and forget what they know in the exam. It's important not to think only about exams." (M_8)

The teacher with the code M_8 also emphasized the importance of the performance grade in the answer.

While two teachers stated that they gave performance grades with the question-answer method they used in the lessons, two teachers stated that they gave grades with the end-of-unit exams.

"Good use of time and question-answer traffic at a level that will grasp the size of the acquisition. For students to adopt the acquisitions, they need to perform the transfer well when they encounter a new situation. Based on this, I direct my questions and manage the process." (M_2)

"I give the average of the quizzes I hold at the end of the unit." (M_{13})

Finally, two teachers stated that they gave performance grades using a scale and that it was fair in this way.

"I use scale. Because I think it's fair." (M_{11})

Alternative Evaluation Methods Used

The purpose of the study was to find out the thoughts of mathematics teachers about measurement and evaluation in a comprehensive way, and in this context, questions were asked about alternative evaluation methods. Results related to this theme are presented in Table 7.

Table 7. *Participant Opinions on Alternative Evaluation Methods*

Theme	Codes	Participants
Alternative Evaluation Methods Used	Performance task	M_1, M_2, M_{11}
	Self-Peer evaluation	M_{15}
	Does not use	M_3, M_4, M_5, M_6, M_7, M_{12}, M_{13}
	Does not know	M_8, M_9, M_{10}, M_{14}

It can be said that one of the most valuable results of the research belongs to this theme. Three of the participating teachers stated that they used the performance task and one of them used self-peer evaluation. While seven teachers did not use alternative evaluation methods, four teachers did not know these methods. Statements of the participants are given below.

"I use the performance task. I use performance evaluation for my students to see where they use mathematics in daily life and to adopt the subjects better." (M_1)

The teacher coded M_1 stated that he used the performance task and he used it because it contributed to the student's association with real life and mathematics.

"I have used peer review and self-evaluation on several occasions. Because I want them to experience a sense of responsibility." (M_{15})

The teacher with the code M_{15} stated that he used self-peer evaluation to develop students' sense of responsibility.

"I can't use it because I don't have time." (M_4)

"Unfortunately, I can't use it very often because the student level is not suitable at my school." (M_6)

"Since I am not very used to alternative methods, I do not even think of using them." (M_{13})

Teachers who did not use alternative evaluation methods offered reasons such as time, student level, and not being used to these methods.

Some of the teachers who do not know alternative evaluation methods stated that they do not know these methods, while others stated the traditional measurement and evaluation techniques they use as alternative methods.

"I give tests to students, it becomes practical." (M_8)

"I don't know these methods." (M_{10})

Competency and Educational Status in Measurement and Evaluation

It was investigated whether the teachers felt competent in measurement and evaluation and whether they received any training other than undergraduate education. The results in this regard are presented in Table 8.

Table 8. *Participant's Opinions on Competency and Education in Measurement and Evaluation*

Theme	Category	Codes	Participants
Competency and Educational Status in Measurement and Evaluation	Competency	Competent	$M_1, M_{10}, M_{11}, M_{12}, M_{14}$
		Incompetent	$M_2, M_3, M_4, M_5, M_6, M_7, M_8, M_9, M_{13}, M_{15}$
	Educational Status	I received training	M_2, M_6, M_{10}, M_{11}
		I did not receive training	$M_1, M_3, M_4, M_5, M_7, M_8, M_9, M_{12}, M_{13}, M_{14}, M_{15}$

In Table 8, it was seen that most of the teachers did not feel competent in measurement and evaluation and they did not receive any training on this subject. All of the teachers who shared the same opinion stated that they wanted to receive training on this subject.

"Since I did not receive any training other than the one during my undergraduate education, I do not consider myself very competent in this regard. I would like to receive training because measurement and evaluation are an important part of education." (M_5)

"I do not feel I am competent enough. I did not receive any training. I would like to be more knowledgeable when doing measurements. That's why I want to receive training about it." (M_7)

There are three teachers who did not receive any training other than undergraduate education and who felt competent in this regard. These teachers also stated that they want to receive training on this subject to improve themselves.

"I feel competent. I didn't have any training but I would like to. Because as a teacher, the more competent I am, the better and it helps me to evaluate students' grades and behaviors in a more detailed and healthy way." (M_1)

"Yes, I feel competent. I haven't got any training. I would like to have a training. I would like to learn different measurement topics that can be used in class." (M_{12})

There are opinions of two teachers who both felt competent in measurement and evaluation and stated that they received training on this subject. These teachers also stated that they would like to be trained again.

"I feel competent for now. However, I think it is necessary to be open to new developments. I would like to receive training again even though I have been trained in this subject before." (M_{10})

Finally, there are opinions of two teachers who do not feel competent in this subject even though they have been trained in measurement and evaluation. While one of these teachers stated that he wanted to receive training again, the other teacher stated that he did not want to receive any training.

"I do not feel competent. I think that it is necessary to benefit more from technology and that it should be integrated into the system. There are many problems even in accessing the EBA (official Education Information Network). Information that is accessible in terms of material should become accessible to everyone. Since this is not possible in the current situation, I cannot carry out a rapid measurement and evaluation process that will save the number of students from being disadvantaged. During my post graduate education, I received training on this subject. But I would like to get a training again." (M_2)

The teacher with the code M_2 stated that she thought it was necessary to make more use of technology for measurement and evaluation.

"Yes, I have got the training. I do not feel competent because student level is a very important

criterion and we have to evaluate according to student level. Lower-level students are particularly challenging at this stage. I do not want to receive training again. Because without experiencing it personally during the school period, it does not make a great contribution." (M_6)

The teacher with the code M_6 mentioned that the level of the student is very important in measurement and evaluation, and the difficulties of getting down to the lower level. He is the only teacher who stated that he did not want to receive any training on this subject. Because he thinks that education will not make any contribution without experiencing it in the school environment.

Measurement and Evaluation Tools

In the study, which measurement and evaluation tool the teachers used and which one they found more effective was investigated.

Table 9. *Participant Opinions on Measurement and Evaluation Tools*

Theme	Category	Codes	Participants
Measurement and Evaluation Tools	Effective	Written	*M_2, M_3, M_5, M_6, M_7, M8, M_9, M_{10}, M_{11}, M_{12}, M13, M_{14}, M_{15}*
		Oral	*M_2, M_4, M_6, M_9, M_{10}, M_{14}*
		Homework	*M_1, M_2, M_6, M_7, M_9, M_{10}*
	Preferred	Written	*M_1, M_3, M_4, M_5, M_6, M_7, M_8, M_9, M_{11}, M_{12}, M_{13}, M_{14}, M_{15}*
		Oral	*M_2, M_6, M_{13}, M_{15}*
		Homework	*M_5, M_6, M_8, M_{10}, M_{13}, M_{15}*

In Table 9, it was determined that teachers preferred written exams, oral exams and homework among measurement and evaluation tools and found them effective. When the participants' opinions were examined, it was determined that the most effective and preferred tool was written.

"I think written exams are more effective. I mostly use written exams and homework." (M_5)

"I find written exams more effective and use them. I think it is more objective and time-effective." (M_{11})

"I think written exams are more effective. I use all written exams, oral exams and homework." (M_{13})

While six teachers found oral exams more effective, six teachers stated that they found the homework more effective. However, some teachers stated that they found all three to be effective separately. The statements of the teachers are as follows:

"Homework is more effective. Because it takes place at a time according to the student's own level and the process is evaluated." (M_1)

"There are areas where they are all effective. For some subjects, an oral exam may be effective, but for a problem that requires a longer time, homework may be effective. It may change depending on the acquisition." (M_2)

"Students express themselves orally the best." (M_4)

"In my opinion, there is no single measurement and evaluation, there may be different situations in which written, oral, and homework are all effective." (M_9)

When the factors in the effectiveness of the homework were examined, it was taken into account that the student was given enough time and the process was evaluated. On the other hand, it was stated that students could express themselves better in the oral exams. Also, it was stated by the teachers that there are areas where not only one but also all of them are effective according to the acquisition and situation.

When the codes related to the most preferred measurement and evaluation tools were examined, four teachers stated that they preferred oral exams and six teachers' homework. Some teachers stated that they use all three. The statements of the teachers are as follows:

"I save time by getting immediate feedback on the oral exam and I can communicate with many more

students at the same time and set the tone in the classroom. Also, direct communication may be more effective in terms of the self-expression of the students." (M_2)

"I prefer homework more because a regular study is important for the student." (M_{10})

"Written exam, oral exam, homework. I can say that I use them all equally. Because they are all effective." (M_6)

There are opinions stating that the oral exam is preferred more in terms of immediate feedback and being able to communicate directly with the student. It was stated that homework was preferred because it allowed the student the opportunity to study regularly.

DISCUSSION, CONCLUSION, RECOMMENDATIONS

In this study, the opinions of mathematics teachers on measurement and evaluation were investigated in detail. Within the scope of the study, firstly, the aims of teachers to perform measurement and evaluation in mathematics lessons were examined. While half of the participating teachers stated that they performed measurement and evaluation to determine the level of learning acquisitions, some participants stated that they performed measurement and evaluation to determine the level and control the readiness. Also, some teachers stated that they performed the measurement and evaluation to determine the deficiencies and misconceptions of the students. A teacher with 15 years of professional experience stated that he performed measurement and evaluation on graded students. In the study conducted by Birgin and Gürbüz (2008) with elementary school teacher candidates, the participants stated that they would do measurement and evaluation to determine the level of obtaining acquisitions, the knowledge level of the students, to direct the teaching and to give grades. Therefore, the results of the two studies are compatible. According to these results, it can be said that mathematics teachers do not have enough knowledge about the purposes of measurement and evaluation. When teachers' opinions were studied, it was seen that they generally thought about the product, and very few teachers gave their opinions on formative evaluation. However, formative evaluation offers important advantages in terms of increasing the quality of teaching, diagnosing and developing student weaknesses and deepening learning (Black & Willam, 1998a; 1998b; Stiggins, 2002).

The frequency of measurement and evaluation by teachers is also within the scope of the study. Most of the teachers stated that they made the measurement and evaluation at the end of each unit. This is a pleasing situation in terms of formative evaluation. Also, some teachers stated that they performed measurement and evaluation only with the written exams held during the year. This situation is quite wrong in terms of measurement and evaluation. Because when the content validity of the two exams held during the semester is considered, it will be very weak in determining the deficiencies of the students. Some teachers stated that they performed the measurement and evaluation every two weeks. Two teachers stated that they performed the measurement and evaluation in every lesson; however, one of them did not always do it in written form, but sometimes with verbal questions or with alternative evaluation methods. It was determined that this teacher used the performance task, which is one of the alternative evaluation methods.

Another subject covered in the research is the types of questions that teachers use most in written exams. It was seen that teachers mostly use multiple-choice and open-ended questions in written exams. This result is the same as the opinions of the teachers who participated in the study by Önel et al. (2020). Also, some teachers stated that they also included true-false questions in their exams in addition to open-ended and multiple-choice questions. Teachers who preferred the open-ended question type stated that the mathematics course was more appropriate due to its structure and they preferred it because it provided the students with the opportunity to see their mistakes. The teachers who preferred the multiple-choice question type stated that they used this question type in order to prepare their students for the LGS (High School Transition System) exam. The answers of two teachers who preferred true-false and multiple-choice questions are interesting. These teachers stated that they preferred multiple-choice and true-false types of questions for students to get higher grades. These teachers stated that they work in rural areas and the success level of the students is low, so they prefer such questions in order to get high grades.

Examining the results regarding the steps that teachers give importance to in the evaluation of project assignments, the majority of the participating teachers mentioned more than one issue to which they attach importance. The most common answer was the careful preparation of the assignment. Time and scale were other issues that teachers gave importance to in the evaluation of project assignments. While four of the teachers who give importance to time cared about the fact that the homework should be delivered on time, one of them determined the efficient use of time as a criterion. This may be because teachers want to develop their students' sense of responsibility. Some teachers stated that they used certain scales while evaluating their project assignments. While some of these teachers stated that they prepared the scales according to the content of the homework, some of them stated that they used ready-made evaluation scales. Along with these, there are teacher opinions that give importance to the content and originality of the assignment. The mathematics teachers who participated in the study by Esen and Güneş (2012) stated that they gave importance to criteria such as time, scale, content, and order when evaluating project assignments. It is consistent with the results of the present study. Another result achieved under this theme is that students are given question-solving as a project assignment. Considering the purpose and functions of the project assignments, it can be said that an assignment in the form of a ready-made question-solution is quite wrong, and because the purpose of the project assignments is to develop students' cognitive, affective, and psychomotor skills such as examining, researching, interpreting, developing opinions, reaching new information, producing and inferring with original thoughts, problem-solving, reading comprehension, and using creativity, and to provide a product at the end of the process (MoNE, 2013). In this context, informative trainings on project assignments can be organized for teachers. Finally, it was understood that the teachers paid attention to one or a few issues in the evaluation of the project assignments and could not complete the evaluation.

Examining the results related to the steps that teachers give importance to in giving students' performance grades, it was seen that they mostly care about in-class participation and homework. Consistent with the results of this study, another study in which homework was used to give in-class participation grades was conducted by Yıldırım (2018). There are teachers who use the question-answer technique in the lessons and give performance grades on a scale because it is fair.

The study aimed to examine the thoughts of mathematics teachers about measurement and evaluation in a comprehensive way, and in this context, questions were asked about alternative evaluation methods. It can be said that one of the most valuable results of the research belongs to this theme. Three of the participating teachers stated that they used the performance task and one of them used self-peer evaluation. While seven teachers did not use alternative evaluation methods, four teachers did not know these methods. It has been determined by various studies (Birgin, 2006; Çakan, 2004; Erdal, 2007; Gözütok, Akgün & Karacaoğlu, 2005; Güven, 2001; Güven & Eskitürk, 2007; Yaşar et al., 2005) that most of the teachers working in Turkey do not have sufficient knowledge about alternative measurement and evaluation techniques. As a result of this study, it was found that teachers generally use traditional measurement and evaluation techniques. This result is compatible with Şimşek's (2011) study results. However, it is difficult because it is not possible to evaluate the students in a multi-dimensional way with traditional measurement and evaluation (Şimşek, 2011). On the other hand, the fact that alternative measurement and evaluation techniques allow for multidirectional evaluation leads to the fact that the abilities of the students are easily understood by the teachers. Therefore, with alternative measurement and evaluation techniques, students can be better known, which makes teachers' work easier (Şimşek, 2009). Teachers should give importance to the use of alternative measurement and evaluation techniques.

The teacher who used the performance task as one of the alternative evaluation methods stated that he used it because it contributed to the student's association with real life and mathematics. Similarly, in a survey applied to 38 people by Sağlam-Arslan, Avcı and İyibil (2008), a significant number of the participants stated that performance tasks are the most effective method that can be used in physics teaching. In his research with history teachers, Karakuş (2020) stated that the most frequently used alternative measurement-evaluation methods are performance tasks and projects. The teacher, who used self-peer evaluation, stated that he used self-peer evaluation to develop students' sense of responsibility. Teachers who did not use alternative evaluation methods offered reasons such as time, student level, and not being used to these methods. Similar reasons given by teachers who do not use alternative measurement and evaluation methods were also presented by teachers in Şimşek's (2011) study. Some of the teachers who do not know alternative evaluation methods stated that they do not know these methods, while others stated the traditional measurement and evaluation techniques they use as alternative methods. As a result, it was seen that mathematics teachers were not interested in alternative measurement and evaluation approaches and did not use these methods. However, it was seen that the mathematics teachers who participated in the study by Önel et al. (2020) showed a positive approach towards alternative measurement-evaluation methods.

It was investigated whether the teachers felt competent in measurement and evaluation and whether they received any training other than undergraduate education. It was seen that most of the teachers did not feel competent in measurement and evaluation and they did not receive any training on this subject. In the study conducted by Birgin and Gürbüz (2008) with classroom teacher candidates, the majority of teacher candidates stated that they did not feel competent in measurement and evaluation. Therefore, the results of the two studies are compatible. All of the teachers who stated that they did not feel competent said that they wanted to receive training on this subject. In this regard, it can be said that teachers are willing to improve themselves. All but one of the teachers participating in the study stated that they wanted to receive training on this subject. Teachers stated that measurement and evaluation are important parts of education, and they want to improve themselves in this regard. The only teacher who stated that he did not want to receive any training on this subject expressed that by stating that training would not have any contribution without experiencing it in a school environment.

In the study, which measurement and evaluation tool the teachers used and which one they found more effective were investigated. It was determined that teachers preferred written exams, oral exams, and homework among measurement and evaluation tools and found them effective. This result is compatible with the results of Gök and Şahin (2009). Examining the participants' opinions, it was determined that the most effective and preferred tool was writing. There are opinions of teachers who found each of them effective and used them separately, as well as opinions of teachers who stated that they found all three effectives separately. No teacher mentioned alternative techniques as the most preferred or most effective tool. Therefore, with this theme, it was determined again that teachers prefer traditional methods.

Recommendations for research results,

- Empirical observations indicate that educators employ both multiple-choice and open-ended question formats in written examinations. Targeted instructional programs aimed at enhancing teachers' proficiency in utilizing diverse question types could be strategically organized.
- To ensure objectivity in the evaluation of project assignments and giving performance grades, it is recommended to use evaluation scales more effectively and to inform teachers about this issue.
- The findings of the study reveal that mathematics educators exhibit insufficient familiarity with alternative measurement and evaluation methodologies. Consequently, it is recommended that comprehensive integration of these alternative techniques be incorporated into mathematics pedagogical programs and textbooks.
- In addition to the 'measurement and evaluation' course, which has different names in undergraduate programs, a course for 'alternative measurement and evaluation methods' can be opened. In these courses, practical activities should be emphasized in addition to theoretical knowledge.

Recommendations for researchers

- Research on the reasons for not applying the alternative measurement and evaluation techniques should be expanded, and practices should be made to eliminate these reasons.

- The same study can be carried out with more teachers and teachers from different branches in a larger sample group.
- The opinions of mathematics teacher candidates, who are the teachers of the future, on measurement and evaluation can be examined.

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GENİŞLETİLMİŞ ÖZET

Giriş: Ölçme ve değerlendirme eğitim öğretim sürecinin ayrılmaz bir parçasıdır. Ölçme ve değerlendirmenin olmadığı bir eğitim süreci düşünülemez. Eğitim sürecinin önemli bir parçası olan ölçme ve değerlendirme süreci matematik eğitiminde de oldukça önemlidir. Matematik dersi yığmalı bir ders olduğundan öğrenmenin tam olarak gerçekleşebilmesi için ön kazanımların tam olarak elde edilmiş olması önem arz etmektedir. Bu nedenle yapılacak olan ölçme ve değerlendirme de bu anlamda matematik için önem arz etmektedir. Ölçme ve değerlendirme sonucuna göre eksik olan kısımlar tamamlanarak yeni konulara geçilmesi oldukça önemlidir. Bu kapsamda bu araştırmanın amacı matematik öğretmenlerinin ölçme değerlendirmeye ilişkin görüşlerini kapsamlı bir şekilde incelemektir.

Yöntem: Araştırma durum çalışması olarak yürütülmüştür. Araştırmanın çalışma grubunu 2021-2022 eğitim-öğretim yılında Türkiye'nin çeşitli bölgelerindeki okullarda görev yapan 15 gönüllü matematik öğretmeni oluşturmaktadır. Araştırmanın verilerinin toplanmasında yarı yapılandırılmış görüşme yöntemi, verilerin analizinde içerik analizi tekniği kullanılmıştır.

Bulgular ve Tartışma: Araştırma kapsamında ilk olarak öğretmenlerin matematik derslerinde ölçme değerlendirme yapma amaçları incelenmiştir. Kazanımların öğrenilme düzeyini belirlemek, seviye, eksiklik ve kavram yanılgılarını belirlemek, hazırbulunuşluğu kontrol etmek ve not vermek için ölçme değerlendirme yaptığını belirten katılımcı görüşleri mevcuttur. Benzer olarak Birgin ve Gürbüz'ün (2008) sınıf öğretmeni adayları ile yürüttüğü çalışmada öğretmen adayları ölçme değerlendirmeyi kazanımların elde edilme düzeyini belirlemek, öğrencilerin bilgi seviyesini tespit etmek, öğretimi yönlendirmek ve not vermek amacıyla yapacaklarını belirtmişlerdir. Öğretmenlerin görüşleri incelendiğinde genel olarak ürün hakkında düşündükleri ve çok az sayıda öğretmenin biçimlendirici değerlendirme konusunda görüş bildirdiği görülmüştür. Ancak biçimlendirmeye yönelik değerlendirme, öğretimin niteliğinin arttırılması, öğrencinin zayıf yönlerinin teşhis edilip geliştirilmesi ve öğrenmeyi derinleştirmesi açısından önemli avantajlar sunmaktadır (Black ve Willam, 1998a; 1998b; Stiggins, 2002).

Öğretmenlerin ölçme ve değerlendirme sıklığı da çalışmanın kapsamındadır. Öğretmenlerin çoğu ölçme ve değerlendirmeyi her ünite sonunda yaptıklarını belirtmişlerdir. Bu durum biçimlendirici değerlendirme açısından sevindirici bir durumdur. Ayrıca bazı öğretmenler ölçme ve değerlendirmeyi sadece yıl içinde yapılan yazılı sınavlarla yaptıklarını belirtmişlerdir. Bu durum ölçme ve değerlendirme açısından oldukça yanlıştır. Çünkü yarıyıl içinde yapılan iki sınavın kapsam geçerliği dikkate alındığında öğrencilerin eksiklerinin tespit edilmesi oldukça zayıf olacaktır.

Öğretmenlerin yazılı sınavlarda çoğunlukla çoktan seçmeli ve açık uçlu sorular kullandıkları belirlenmiştir. Bu sonuç Önel ve arkadaşlarının (2020) araştırmasına katılan öğretmenlerin görüşleri ile aynıdır. Bunun yanı sıra açık uçlu ve çoktan seçmeli sorulara ilave olarak sınavlarında doğru yanlış türünde sorulara da yer verdiklerini belirten görüşler mevcuttur. Açık uçlu soru türünü tercih eden öğretmenler matematik dersinin yapısı gereği daha uygun olduğunu ve öğrencilerin hatalarını görme imkânı sağladığı için tercih ettiklerini belirtmişlerdir. Çoktan seçmeli soru türünü tercih eden öğretmenler öğrencilerinin LGS sınavına hazırlıklı olması açısından bu soru türünü kullandıklarını belirtmişlerdir. Doğru yanlış ve çoktan seçmeli soru türünü tercih eden iki öğretmenden gelen cevaplar ise dikkat çekicidir. Bu öğretmenler çoktan seçmeli ve doğru yanlış tarzında soru türlerini öğrencilerin daha yüksek not alması için tercih ettiklerini belirtmişlerdir. Bu öğretmenler kırsal bölgede çalıştıklarını ve öğrencilerin başarı düzeylerinin düşük olduğunu ve yüksek not almaları için bu soru türlerini tercih ettiklerini belirtmişlerdir.

Öğretmenlerin proje ödevlerinin değerlendirilmesinde önem verdikleri basamaklara ilişkin bulgular incelendiğinde ödevin özenli hazırlanması, zaman ve ölçek cevapları gelmiştir. Zaman konusunda bahseden öğretmenler ödevin zamanında teslim edilmesi ve zamanın verimli kullanmasını kriter olarak belirlemişlerdir. Bu durum öğretmenlerin öğrencilerinin sorumluluk bilincini geliştirmeyi istemesinden kaynaklı olabilir. Benzer şekilde Esen ve Güneş'in (2012) araştırmasına katılan matematik öğretmenleri proje ödevlerini değerlendirirken zaman, ölçek, içerik ve düzen gibi kriterlere önem verdiklerini belirtmişlerdir. Bu tema altında ulaşılan bir diğer bulgu proje ödevi olarak öğrencilere soru çözümü verilmesidir. Proje ödevlerinin amacı ve işlevleri düşünüldüğünde hazır soru çözümü şeklinde bir ödevin oldukça yanlış olduğu söylenebilir. Çünkü proje ödevlerinin amacı öğrencilerde inceleme, araştırma, yorum yapma, görüş geliştirme, yeni bilgilere ulaşma, özgün düşüncele üretme ve çıkarımda bulunma, problem çözme, okuduğunu anlama, yaratıcılığını kullanma gibi öğrencinin bilişsel, duyuşsal ve psikomotor alandaki becerilerini geliştirmek ve süreç sonunda ürün ortaya koymasını sağlamaktır (MEB, 2003).

Öğretmenlere alternatif değerlendirme yöntemleri ile ilgili sorular yöneltilmiştir. Araştırmanın en değerli bulgularından birinin bu temaya ait olduğu söylenebilir. Katılımcı öğretmenlerin üçü performans görevini, biri öz-akran değerlendirmeyi kullandığını belirtmiştir. Yedi öğretmenin alternatif değerlendirme yöntemlerini kullanmadığı görülürken dört öğretmenin ise bu yöntemleri bilmediği tespit edilmiştir. Türkiye'de görev yapmakta olan çoğu öğretmenin alternatif ölçme ve değerlendirme teknikleri konusunda yeterli bilgi sahibi olmadıkları çeşitli araştırmalarla (Güven, 2001; Çakan, 2004; Gözütok, Akgün ve Karacaoğlu, 2005; Birgin, 2006; Güven ve Eskitürk, 2007) saptanmıştır. Bu araştırma sonucunda da öğretmenlerin genel olarak geleneksel ölçme ve değerlendirme tekniklerini kullandıkları bulgusuna ulaşılmıştır. Ancak geleneksel ölçme değerlendirme de öğrencilerin çok yönlü değerlendirilmesi mümkün olmadığı için öğrenciyi değerlendirmek zordur (Şimşek, 2011). Buna karşılık alternatif ölçme ve değerlendirme teknikleri; öğrencileri çok yönlü değerlendirmeye fırsat tanıdığı için, öğrencilerin yeteneklerinin öğretmenler tarafından kolaylıkla anlaşılmasına imkân sunar. Dolayısıyla alternatif ölçme değerlendirme teknikleri ile öğrenciler yakından tanınabilmekte, bu durum ise öğretmenlerin işlerini kolaylaştırmaktadır. (Şimşek, 2009).

Öğretmenlerin ölçme değerlendirme araçlarından yazılı, sözlü ve ödevi tercih ettikleri ve bunları etkili buldukları belirlenmiştir. Bu sonuç Gök ve Şahin'in (2009) araştırma sonuçları ile uyumludur. Katılımcı görüşleri incelendiğinde en etkili bulunanın ve en çok tercih edilenin yazılı olduğu belirlenmiştir. En çok tercih edilen veya en etkili bulunan araç olarak alternatif tekniklerden bahseden öğretmen olmamıştır. Dolayısıyla bu tema ile de öğretmenlerin geleneksel yöntemleri tercih ettikleri tekrar tespit edilmiştir.

Son olarak katılımcı öğretmenlerin çoğunluğunun ölçme ve değerlendirme konusunda kendileri yeterli hissetmedikleri ve bu konuda herhangi bir eğitim almadıkları tespit edilmiştir. Kendisini yeterli hissetmediği şeklinde görüş bildiren öğretmenlerin tamamı bu konuda eğitim almak istediklerini belirtmişlerdir. Bu kapsamda öğretmenlerin kendilerini geliştirme noktasında istekli oldukları söylenebilir.

Sonuç ve Öneriler:

Araştırma sonuçlarına yönelik öneriler

• Öğretmenlerin yazılı sınavlarda çoğunlukla çoktan seçmeli ve açık uçlu sorular kullandıkları tespit edilmiştir. Öğretmenlere farklı soru türlerinin kullanımına yönelik bilgilendirme eğitimleri düzenlenebilir.

• Araştırma sonucunda matematik öğretmenlerinin alternatif ölçme ve değerlendirme teknikleri konusunda yeterli bilgiye sahip olmadıkları görülmüştür. Bu bakımdan matematik öğretim programlarında ve matematik ders kitaplarında alternatif tekniklere ilişkin kapsamlı uygulamalara yer verilebilir.

• Lisans programlarında farklı adlarla anılan 'ölçme ve değerlendirme' dersine ek olarak 'alternatif ölçme ve değerlendirme yöntemleri' dersi de açılabilir. Bu derslerde teorik bilgilerin yanı sıra pratik faaliyetlere de ağırlık verilebilir.

Araştırmacılar için öneriler

• Alternatif ölçme ve değerlendirme tekniklerinin uygulanmama nedenlerine ilişkin araştırmalar artırılmalı ve bu nedenlerin ortadan kaldırılmasına yönelik uygulamalar yapılmalıdır.

• Geleceğin öğretmenleri olan matematik öğretmeni adaylarının ölçme ve değerlendirmeye ilişkin görüşleri incelenebilir.

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Prospective Teachers' Views on the Impact of Competitive Educational Practices on Students

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ABSTRACT

This study aims to determine "prospective teachers' perspectives on the impact of competitive practices in formal basic education on students". Bearing a descriptive qualitative nature, this research utilizes the phenomenology design among qualitative research methods. The research study group consists of 205 fourth-year students attending Gazi University, Gazi Faculty of Education during the 2021-2022 academic year spring semester. The study's data were collected through an interview form created by the researcher. The research data were analyzed using the interpretative phenomenological analysis method, grouped by observation frequency and percentage distributions, and interpreted based on the relevant literature. According to the study's findings, prospective teachers believe that competitive practices in education negatively affect students in terms of stress, blame, tension, hostility, ruthlessness, anxiety, pressure, exclusion, and violence. Ending such practices to protect students from the negative impacts of competitive practices in formal basic education can be recommended. Additionally, awareness among prospective teachers and teachers can be supported by including courses or topics related to competitive educational philosophy in teacher training and in-service training curricula.

Eğitimdeki Yarışmacı Uygulamaların Öğrenciler Üzerindeki Etkisine İlişkin Öğretmen Adaylarının Görüşleri

Makale Bilgileri

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ÖZ

Bu çalışmanın amacı, "örgün temel eğitimdeki yarışmacı uygulamaların öğrenciler üzerindeki etkisine ilişkin öğretmen adaylarının görüşleri"ni belirlemektir. Betimsel bir nitelik taşıyan araştırmada, nitel araştırma yöntemlerinden fenomenoloji deseni kullanılmıştır. Araştırmanın çalışma grubu, 2021-2022 öğretim yılı bahar döneminde Gazi Üniversitesi, Gazi Eğitim Fakültesinde öğrenim gören 205 dördüncü sınıf öğrencisinden oluşmaktadır. Araştırmanın verileri, araştırmacı tarafından oluşturulan görüş formu yardımıyla toplanmıştır. Araştırma verileri, gözlem sıklığı ve yüzdesel dağılımlara gruplandırılarak, yorumlayıcı fenomenolojik analiz yöntemiyle çözümlenmiş ve ilgili alanyazına dayalı olarak yorumlanmıştır. Araştırma sonuçlarına göre öğretmen adayları, eğitimdeki yarışmacı uygulamaların öğrencileri; stres, suçlama, gerginlik, düşmanlık, acımasızlık, kaygı, baskı, dışlanma, şiddet konularında daha çok olumsuz etkilediği görüşünde olduğu belirlenmiştir. Öğrencileri örgün temel eğitimdeki yarışmacı uygulamaların olumsuz etkisinden korumak için yarışmacı uygulamalara son verilmesi önerilebilir. Ayrıca, öğretmen yetiştirme ve hizmetiçi eğitimi öğretim programlarına yarışmacı eğitim anlayışına ilişkin ders veya konular eklenerek öğretmen adaylarının ve öğretmenlerin bilinçlenmesi desteklenebilir.

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INTRODUCTION

Although rivalry is commonly used instead of competition in everyday language and various disciplines, this study employs the term competition, its Turkish equivalent. In the current Turkish dictionary (Turkish Language Association [TLA]., n.d.), competition is defined as the act of competing, contest, rivalry, striving to be superior to others, effort to gain superiority, contention among those pursuing the same goal, and the act of competing to demonstrate excellence in knowledge, skill, beauty, sports, and the like.

In their assessment of the psychology of competition, Garcia, Tor, and Elliot (2021) emphasized that competition primarily relates to individuals' subjective feelings, perceptions, motivations, intentions, and behaviors. Robbins and Judge (2007) define competition as a phenomenon arising because one party in contention desires to satisfy their own wishes, regardless of the impact on the other party. The term 'competition', used for activities occurring between two or more individuals, groups, organizations, institutions, powers, establishments, businesses, or systems, is frequently utilized in fields encompassing biology, sports, economics, business administration, environmental science, and the arts.

The concept of competition is also defined as the struggle for survival, explained by the conceptualization of natural selection (Darwin, 2017), used to explain evolution as a biological principle. However, Kropotkin (2001) states that Darwin's later works show a sense of solidarity and cooperation within the same species and that cooperation is a dominant phenomenon in nature and is essential for the survival and development of the species. Axelrod's (1984) answer to how cooperation and solidarity arise and stabilize supports this idea.

There are important studies and evaluations on the individual and social effects of the competition phenomenon, which is also used in different ways in the field of education. Analyzing the relationship between competition in education and social structure in detail, Butera, Swiatkowski, and Dompnier (2021) reveal how the dominant ideologies, values, and norms in society—such as neoliberalism, meritocracy, the free market, employment, and production—are transferred to education. Monbiot (2016) argues that neoliberalism sees competition as a defining feature of human relations. Hargreaves (1982) argues that the capitalist education system promotes individualism and competition rather than social solidarity and shared values, noting that educational norms oppose cooperative learning and encourage individuals to try and beat each other instead of social solidarity. Inglis (2004) argues that the main weakness of the British education system is its competitive nature and emphasizes that this is incompatible with the ideal of a good society. This finding can be shown as an essential example of how competition in education encompasses educational systems. However, the meaning attributed to the concept of competition may differ historically or periodically and may be understood differently from society to society. For example, Morgan (2010), who encountered a state of non-competition in a narrative about the lives of Aboriginal people, describes her experience as follows:

"... I suggested that they line up in a line and start running fast so that I could describe one of our races, and I told them that the fastest runner would be the winner. The tribespeople looked at me with their beautiful black eyes wide open, and one of them said, but if one person wins, all the others lose. What fun is that? Games are for fun. Why do you subject people to such an experience and try to make one person believe he is the real winner? It is really difficult for us to understand, but can your people accept it?"

Explaining this situation with the concept of ubuntu, Langa (2007) defines ubuntu as a universal human value that is used as a remedy against greed, cruelty, injustice, and violence caused by neoliberalism; a person who believes in ubuntu is open and positive towards others, does not feel threatened when others are good and talented, has self-confidence that comes from knowing that they are part of a larger whole, and feels humiliated when others are humiliated, degraded, brutalized, or crushed.

In the related literature (Blanchard, 1989; Clifford, Cleary & Walster, 1972; Clinkenbeard, 1989; Crombag, 1966; Cropper, 1998; Deutsch, 1949; Gibson, Kincade & Frasier, 2013; Hwang & Chang, 2016; Johnson & Johnson, 1989:2009; Johnson, Johnson & Scott, 1978; Kohn, 1986; Lam & Seaton, 2016; Merino, Molina, Organero & Kloos, 2014; Ökmen, Şahin, Boyacı & Kılıç, 2019; Roweton, 1982; Tjosvold & Johnson, 2000; Ural, 2004, 2006, 2016), there are different studies on the competition. In these studies, competition was evaluated in relation to education as well as in general. The studies that consider competition in relation to education (Ames & Ames, 1981; Ames, 1984; Bergin, 1995; Blanchard, 1989; Butera, Swiatkowski & Dompnier, 2021; Cantador & Conde, 2010; Lam, Yim, Law & Cheung, 2001; Nelson & Dawson, 2017; Rhodes & Brickman, 2011; Stapesl & Koomen, 2005; Vallerand, Gauvin & Halliwell, 1986) have reached important findings regarding the effects of competition. Verhoeff (1997) noted that there is no consensus among educational theorists as to whether competitive desires should be encouraged or restricted within two groups: The ones who argue that education should transmit culture since competition is part of culture and institutional competition should be incorporated into education to help children become accustomed to it later in life; the ones who view competition as opposed to cooperation and therefore a destructive element in culture that should be restricted. Blanchard (1989) reviewed the literature on competitive behaviors in children: the socialization process of competitiveness, evolutionary foundations, early developmental processes, the relationship between competition and aggression, gender differences, competition and cooperation, anthropological perspectives, the effects of competition, assimilated values, stress, and anxiety. They stated that competitive behavior has many types, has a multifactorial basis, has a complex interrelationship with other developmental phenomena, is closely related to stress, and can be a positive developmental feature in terms of success when applied in a balanced way, but excessive or inappropriate competition can also be harmful. Nelson and Dawson’s (2017) studies also show that competitive environments lead to the formation of negative emotions such as fear of rejection, constant need for approval, overly competitive attitudes, feeling worthless, stress, anxiety, and depression. Kohn (1986) reviewed the empirical research on whether competition is better than collaboration in many fields such as education, sports, performing arts, and psychology and concluded that competition generally leads to less creativity, lower performance, and less satisfaction. Similarly, Johnson and Johnson (2009), in a review of studies on the effects of competition-based learning, individual learning, and cooperative learning on achievement, concluded that cooperative learning leads to more positive results than individual and competition-based learning in areas such as forming high-level logic, generating new ideas and solutions, and transferring knowledge learned in one situation to other areas. Deutsch (1949) stated that cooperative relationships show a number of positive characteristics, such as more effective communication and coordination, open and friendly attitudes, a sense of reciprocity, and a desire to increase the power of the other, while competitive processes tend to lead to adverse effects such as impeded communication, an inability to coordinate activities, suspicion, a lack of self-confidence, and a desire to reduce the power of the other and dominate them. Telser (1987) argues that an efficient economic equilibrium depends on an optimal combination of cooperation and competition. In the face of all these effects of competition, everyone, especially educational scientists, needs to be sensitive to the issue of competition in education, taking into account Inglish’s (2004) warning that there is a struggle for survival in an ever-more competitive world. The natural co-existence of cooperation and competition needs to be grasped and understood through sociological imagination—what Mills (1979) calls human diversity, including the individual diversity of existence.

In Turkey, the grading and differentiation of schools at the basic education level and the conditioning of transitions between grades reveal the competitive character of the education system. In addition, the problematic structure of the higher education subsystem and the practices related to the transition to higher education have shaped the basic education subsystem through a competitive education approach (Ural, 2004, 2006, 2016). The competitive nature of the Turkish education system is clearly seen in the 739 exams taken during the formal education process, from primary school to university (Education and Science Laborers Union [ESWU] 2008). The Universal Declaration of Human Rights (United Nations [UN], n.d.), which guarantees the right to education, leaves the initiative regarding the duration, type, and structure of the school(s) to be included in the basic education process to the state authorities—the government. This understanding, which was also reflected in Turkey, paved the way for the emergence of different school durations, types, and structures with educational policies in line with the ideology adopted by the governments. In 2012, with a legal regulation (İlköğretim ve Eğitim Kanunu ile Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun [Law on Amendments to the Primary Education and Education Law and Some Laws], 2012), the 8-year compulsory uninterrupted education introduced in 1997 was extended to 12 years and transformed into an interrupted structure. This structure, which is still in effect today, consists of four years of primary, middle, and high school education and reflects the school system in Turkey. This arrangement, which re-graded uninterrupted primary education (elementary school, middle school, or high school) and interrupted it, has also created results supporting the education system's competitive character. In Turkey, which has an education system with high inequalities between schools (Organisation for Economic Co-operation and Development [OEDC], 2023) and a high number of school types, the competitive understanding of education has become deeply rooted in the rapidly increasing commercial-private schooling (Ural, 2016) in parallel with the marketization of education. In the Turkish education system, from when compulsory education was not part of the education system until today, a culture of open and implicit competition has been created for high school entrance and university entrance. These competitive educational practices have created a shadow education system consisting of courses, study centers, tuition centers, and other similar elements in and out of schools. The social and individual consequences of this process have been the subject of research in various aspects. Competitive practices that permeate every level of the education system like discrimination, hurt, humiliation, exclusion, abuse, exploitation, insecurity, miscommunication, falsification, misleading, focusing on the negative, excessive control, psychological and physiological violence, glorifying academic success, supporting elitist education, making public education defective, increase in exams, the understanding of one-way evaluation of the individual have led to consequences such as inhibition of self-development, social isolation, deprivation, distancing from altruistic behavior, restriction of freedoms, threat to child welfare, alienation, decrease in curiosity and imagination, and inhibition of creativity (Ural, 2004, 2006, 2016). In this process, the teacher's attitude, the education system's main component, towards competitive practices in education is an important determinant. In fact, the attitude of the teacher, who is limited to the role of a passive transmitter technician teacher (Aronowitz & Giroux, 1985; Giroux & McLaren, 1986; Giroux, 1991; Kumaravadivelu, 2003; Ural, 2020, 2021), In banker education (Freire, 1991), systems structured based on traditional mainstream education understanding are even more important. In schools, which Althusser (2003) characterized as the ideological apparatus of the state, one way to confront the definition of the teacher by the government (Ural, 2003) is for the teacher to protect students from the harmful effects of competitive practices in education. This research is vital in determining prospective teachers' positions on this issue. The fact that prospective teachers have observed and been exposed to competitive education practices at every stage of the formal education process and that they will be involved in the practice as teachers in their professional lives makes their views on this issue crucial. This study aims to determine prospective teachers' views on the effects of competitive practices on students in formal basic education.

METHOD

In this descriptive study, phenomenology design (Creswell, 2013; Merriam, 2009), one of the qualitative research methods, was used. According to Creswell (2013), the phenomenological study defines the common meaning of the experiences of many individuals about a concept or phenomenon. The participants of the study were 205 fourth-grade students studying in thirteen different departments of Gazi University, Gazi Faculty of Education, in the academic year 2021-2022. The data for the study were collected with the help of a structured opinion form about the effects of competitive practices in education on students. Punch (2005) stated that the main feature of a structured interview is that the questions and response categories are standardized and arranged in a certain order. In the creation of the opinion form used in the study, the process of creating a pool of propositions, structuring them, and evaluating them as suggested by Schwab (1980) was followed. In the creation of the suggestion pool, the relevant literature (Bloom, 1979; Çetinkanat, 2005; Ural, 2012) was reviewed, and 58 qualities and/or areas related to the student's being affected by the competitive practices used in the formal education process were identified. In the second stage, the options for the participants to express their opinions about the effect of the qualification and/or field variables on each other in the opinion form were determined. These options were expressed as follows: the competitive practice in formal basic education does not affect the student, positively affects, negatively affects, and positively-negatively affects. In the last stage, to ensure the validity and reliability of the opinion form, two experts read it in terms of language and expression appropriateness, and their criticisms and suggestions were utilized. After the necessary corrections, the opinion form, which consisted of 52 qualities and areas, was reduced to 45 qualities and areas by presenting it to the evaluations of experts in pedagogy, andragogy, psychology, sociology, guidance, psychological counseling, child development, and social work, which are the academic fields related to the subject. The relevant opinion form was applied by the researcher in the spring semester of 2022, following the permission numbered 2022-246 obtained from the Gazi University Ethics Committee. At this stage, the data were analyzed with descriptive statistics. The frequencies and percentages of the participant opinions expressed for each judgment in the opinion form were determined. With this description, the general distribution of the participant's views on the subject was shown in the frequency table.

The frequency table shows what measurements were observed, the number of repetitions, and how many individuals took which measurements (Arıcı, 1998). The research data, grouped according to observation frequency and percentage distributions, were analyzed with the interpretative phenomenological analysis method and interpreted based on the relevant literature. The interpretative phenomenological analysis method is defined as an approach that facilitates a more holistic understanding of the experience through data collected from participants who experience the same phenomenon in a certain context (Larkin, Saw & Flowers, 2018; Moustakas, 1994; Smith, Flowers & Larkin, 2009; Smith, Jarman & Osborn, 1999; van Manen, 1990). Smith, Fhowers and Larkin (2009) stated that the interpretative phenomenological analysis method, which they defined as a participant-oriented tradition, will be used to analyze the meanings that people attribute to their experiences in the selected subject through what they say or write and draw attention to the necessity of the interpretive participation of the listener or reader—the researcher—in making sense of what is said or written in the application of the method. Therefore, in the application of the interpretative phenomenological analysis method, on the one hand, the researcher makes sense of the participant, and on the other hand, the participant makes sense of the researcher.

FINDINGS / RESULTS AND DISCUSSION

The opinions of prospective teachers on the effects of competitive practices in formal basic education on students are presented in Table 1.

Table 1. *Prospective Teachers' Views on the Effects of Competitive Practices in Formal Basic Education on Students*

No	In formal basic education competitive practices,	does not affect.		positively affects.		negatively affects.		positively and negatively affects.	
		f	%	f	%	f	%	f	%

1	… social bond among students	3	1,44	50	23,92	99	47,37	57	27,27
2	… student's freedom	30	14,35	63	30,14	63	30,14	52	24,88
3	… student's stress	5	2,39	111	53,11	60	28,71	31	14,83
4	… discrimination among students	33	15,79	98	46,89	52	24,88	25	11,96
5	… students blaming each other	21	10,05	103	49,28	48	22,97	34	16,27
6	… tension among students	15	7,18	119	56,94	44	21,05	31	14,83
7	… feeling of hostility in students	37	17,70	111	53,11	32	15,31	28	13,40
8	… feeling of cruelty in students	42	20,10	103	49,28	35	16,75	28	13,40
9	… emotional development of the student	11	5,26	53	25,36	79	37,80	65	31,10
10	… social development of the student	3	1,44	38	18,18	77	36,84	90	43,06
11	… students caring about each other	12	5,74	47	22,49	72	34,45	78	37,32
12	… anxiety in students	11	5,26	108	51,67	59	28,23	31	14,83
13	… pressure on students	13	6,22	126	60,29	43	20,57	27	12,92
14	… feeling of exclusion in students	28	13,40	103	49,28	43	20,57	34	16,27
15	… cooperative behavior in students	3	1,44	46	22,01	62	29,67	98	46,89
16	… communication among students	3	1,44	40	19,14	72	34,45	94	44,98
17	… students’ valuing each other	11	5,26	48	22,97	72	34,45	78	37,32
18	… student's self-confidence	2	0,96	42	20,10	78	37,32	85	40,67
19	… inequality among students	34	16,27	79	37,80	61	29,19	35	16,75
20	… sense of solidarity in the student	5	2,39	51	24,40	59	28,23	92	44,02
21	… student's altruistic attitude	17	8,13	55	26,32	65	31,10	71	33,97
22	… student's sense of justice	13	6,22	40	19,14	73	34,93	83	39,71
23	… student's individuality	22	10,53	48	22,97	65	31,10	73	34,93
24	… friendship among students	6	2,87	46	22,01	85	40,67	72	34,45
25	… student's self-development	10	4,78	44	21,05	67	32,06	87	41,63
26	… student's moral development	22	10,53	37	17,70	78	37,32	72	34,45
27	… student's learning	6	2,87	33	15,79	68	32,54	100	47,85
28	… student's self-actualization	12	5,74	41	19,62	59	28,23	97	46,41
29	… student's happiness	7	3,35	36	17,22	100	47,85	66	31,58
30	… student's academic success	8	3,83	22	10,53	98	46,89	80	38,28
31	… student's artistic development	41	19,62	33	15,79	62	29,67	71	33,97
32	… student's aesthetic feelings	47	22,49	33	15,79	58	27,75	71	33,97
33	… student's ability to engage in dialogue	12	5,74	28	13,40	69	33,01	99	47,37
34	… student's tendency towards violence	46	22,01	90	43,06	49	23,44	23	11,00
35	… lying behavior in students	37	17,70	79	37,80	63	30,14	30	14,35
36	… student's effectiveness	19	9,09	40	19,14	59	28,23	89	42,58
37	… student's scientific attitude	18	8,61	35	16,75	62	29,67	92	44,02
38	… student's sense of responsibility	12	5,74	26	12,44	57	27,27	114	54,55
39	… socialization status of the student	16	7,66	39	18,66	57	27,27	97	46,41
40	… student's critical thinking	9	4,31	36	17,22	62	29,67	102	48,80
41	… student’s creativity	14	6,70	40	19,14	51	24,40	101	48,33
42	… student's democratic attitude	16	7,66	37	17,70	74	35,41	80	38,28
43	… student's anger management	22	10,53	77	36,84	62	29,67	47	22,49
44	… student’s self-expression	12	5,74	33	15,79	65	31,10	99	47,37
45	… student's cognitive development	11	5,26	32	15,31	65	31,10	100	47,85

According to Table 1, the prospective teachers who participated in the study state that the competitive practices in education have a low-level effect on the developmental areas of the students and that they have a positive/negative effect at a high level. These findings show that prospective teachers taking part in the education system have an important sensitivity towards competitive practices in education. These findings are mainly similar to the general results of the studies in the related literature (Deutsch, 1949; Humphreys, 2001; Johnson & Johnson, 2009; Kohn, 1986; Lam, Yim, Law & Cheung, 2001; Nelson & Dawson, 2017; Ökmen, Şahin, Boyacı & Kılıç, 2019; Vallerand, Gauvin & Halliwell, 1986). This similarity suggests that competitive practices and environments in education are concentrated in areas related to negative emotions and states in students, such as:

- fear of rejection,
- need for constant validation,
- feeling worthless,
- stress,

- anxiety,
- less creativity,
- lower success-performance-,
- lower satisfaction,
- blocked communication,
- lower coordination,
- less open and friendly attitudes,
- less sense of reciprocity,
- lack of self-confidence,
- shyness,
- timidity,
- silence,
- addiction,
- aggression,
- closedness to new experiences,
- fear of failure,
- perfectionism,
- less perception of competence,
- less intrinsic motivation,
- desire to dominate and reduce the power of the other,
- less high-level reasoning,
- less likely to generate new ideas and solutions,
- less likely to transfer knowledge learned in one situation to other areas, and
- depression.

Kohn (1986) argues that, contrary to popular belief, competition is not the basis of human nature and that it poisons relationships and prevents individuals from doing their best, ultimately turning everyone into losers. In order to fully explain the effects of competitive education practices that affect individual and social life so much, the concept of embeddedness (Polanyi, 2016) should be used because the results of competitive education practices are not only related to the subjective well-being of the individual in the school-education process (Ryan & Deci, 2000) but also to the working-life workplaces, which, as Bauman (2018) states, have turned into a particularly intense and fierce competition field. Moreover, given the relationship between education and democratic values (Dewey, 1996; Skovsmose, 1994), the market strategies embedded in competitive educational practices call into question the tendency (Engel, 2000) that by supporting the market reform of education, democratic educational reform will also be supported. The competitive education approach has an effect that leads to social and societal segregation through the inequalities it supports and reproduces (Bourdieu & Passeron, 2015). Wilkins (2012) also draws attention to the concrete relationship between the competitive education approach and neoliberal ideology and identifies that competitive practices in education convey individualist and marketist values. Foucault (2013) points out that contemporary authority wants to keep everyone under surveillance and that the child is individualized by being surrounded by the school. As a result of the meritocratic tendency, the function of education to prepare for life, which is based on the idea of preparing the individual for future tasks, is an important illusion. Dewey (1997) rightly characterizes this situation as the sacrifice of an individual's current potential for a hypothetical future. Preventing and limiting the childhood and youth period, which should be experienced as an enthusiastic life process with a competitive education approach, can be considered a clear attack on the right to life. However, education is the fundamental tool for establishing, developing, and sustaining a democratic society where solidarity of purpose and action prevails. Therefore, in a participatory democracy, education is charged with raising fully developed individuals capable of controlling and transforming their own lives. Basic education should aim at raising citizens capable of thinking, questioning, understanding, criticizing, and acting in a way that will enable qualified participation in public life. Kohn (1986) attributes the widespread acceptance of competitiveness, which lacks theoretical and empirical support, to the fact that individuals judge themselves in relation to others and feel good when their competitors fail. It is problematic that in the educational process, the individual—the student—is made to feel that they must be the best in every field and subject. Drawing attention to the use of education as a mechanism that creates internalized authority, Spring (1997) defends the free individual against the educated individual. It is possible to reach the mechanical and organic solidarity described by Durkheim (2006) by using cooperative learning (Johnson & Johnson, 2015) and dialogic learning (Freire, 1991) instead of the competitive education approach that is widely used in education.

CONCLUSION AND RECOMMENDATIONS

According to the research, it was concluded that prospective teachers were of the opinion that competitive practices in education were effective in students' developmental areas. The study shows that the life balance of an individual can be disrupted by increasing competition and rivalry, which is a natural component of a healthy life, above its optimum level. Rather than judging that competition in education is neither completely good nor completely bad, it should be evaluated in relation to its purpose and field of use. This study also shows how the competitive education approach is reproduced through education. Competitive ideologies, values, and norms are explicitly or implicitly transmitted through the dominant educational practices in the education system. In this process, neoliberal and neoconservative ideologies, meritocracy, free-market beliefs and values, and norms, such as productivity and employability are widely adopted. Capitalist education systems—K–12 and higher education—are built on competitive goals, values, and behaviors. This has been achieved by facilitating the dominance of the competitive education approach over the purpose, structure, process, and climate dimensions of education systems. Those who support the competitive education approach argue that the competition exams are open to everyone within the framework of equal opportunity. However, the contest or competition carried out under unequal conditions and circumstances condemns equality of opportunity and remains rhetorical. The relationship between students' exposure to competitive educational practices and their subjective well-being levels can be investigated.

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Investigating University Students' Social Media Stalking Situations

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ABSTRACT

While the increasing use of social media today provides advantages in various aspects of our lives, the problems that these platforms bring also come to light. One of these is "stalking", which is a situation where a person uses social media to access more information about other people's private lives or experiences. Excessive stalking and sending unwanted, disturbing messages can lead to social media harassment. In addition, constantly checking people's social media accounts can lead to severe social media addiction. This study aims to investigate the situation of university students' stalking on social media. In the research, phenomenology design, one of the qualitative research methods, is adopted. Within the scope of the research, 27 students were interviewed using a semi-structured interview form. In the analysis of the data, content analysis was used. Participants' views on the effect of social media on stalking were coded by content analysis and presented in seven different themes, and their experiences were visualized with word clouds. As a result of the research, it was seen that the participants mostly act with a sense of curiosity and frequently stalk their inner circle on social media, and that stalking is more popular due to the accessibility of social media. It was also observed that individuals subjected to stalking are more anxious in their daily lives, and this makes them uncomfortable. It was concluded that excessive stalking can lead to addiction and that precautions should be taken. Based on these results, different suggestions are made about stalking on social media. As an alternative, before stalking turns into an addiction, measures such as seeking psychological support, limiting the time allocated to social media and conducting various awareness activities can be taken. As for future research, the phenomenon of stalking can be investigated in students at the high school-level, and a case study can be developed.

Üniversite Öğrencilerinin Sosyal Medyadaki Stalklama Durumlarının İncelenmesi

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Üniversite Öğrencisi,
Israrlı Takip,
Sosyal Medya Bağımlılığı.

ÖZ

Günümüzde giderek artan sosyal medya kullanımı her ne kadar hayatımıza çeşitli yönlerden avantaj sağlasada, bu platformların beraberinde getirdiği sorunlar da gün yüzüne çıkmaktadır. Bunlardan biri olan "stalking", bir diğer adıyla ısrarlı takip, kişinin sosyal medyayı kullanarak insanların özel hayatları veya yaşantıları hakkında daha fazla bilgiye ulaşması durumudur. Stalklamanın aşırıya kaçması ve istenmeyen, rahatsız edici mesajlar gönderilmesi sosyal medya tacizine sebebiyet vermektedir. Ayrıca sürekli olarak insanların sosyal medya hesaplarını kontrol etmek ileri düzeyde sosyal medya bağımlılığına dönüşebilir. Bu araştırmanın amacı üniversite öğrencilerinin sosyal medyadaki stalklama durumlarının incelenmesidir. Araştırmada nitel araştırma yöntemlerinden olgubilim deseni benimsenmiştir. Araştırmada yarı yapılandırılmış görüşme formu kullanılarak 27 öğrenci ile görüşme gerçekleştirilmiştir. Elde edilen verilerin analizinde içerik analizi kullanılmıştır. Katılımcıların sosyal medyanın stalklamaya etkisi konusundaki görüşleri içerik analizi ile kodlanarak yedi farklı tema halinde sunulmuş, kendi tecrübeleri ise kelime bulutlarıyla görselleştirilmiştir. Araştırma sonucunda katılımcıların en çok merak duygusuyla hareket edip sosyal medyada sıklıkla yakın çevrelerini stalkladıklarını ve sosyal medyanın erişim kolaylığı sayesinde stalklama eyleminin daha popüler olduğu görülmüştür. Ayrıca stalklamaya maruz kalan bireylerin günlük hayatlarında daha tedirgin oldukları ve bu durumun onlara rahatsızlık verdiği gözlemlenmiştir. Aşırı stalklamanın bağımlılığa yol açabileceği ve bunun hakkında önlemler alınması gerektiği saptanmıştır. Sonuçlara dayanarak sosyal medyada stalklama eylemi hakkında farklı öneriler getirilmiştir. Buna örnek olarak stalking bir bağımlılığa dönüşmeden önce psikolojik destek alınması, sosyal medyaya ayrılan zamanın sınırlandırılması ve çeşitli farkındalık çalışmalarının yapılması gibi önlemler alınabilir. Gelecek araştırmalar için stalking olgusu lise seviyesindeki öğrencilerle incelenebilir ve bir durum çalışması geliştirilebilir.

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INTRODUCTION

In today’s world, social media takes up an important part of daily life in our digitalized world with the rapid development of the internet. The definitions of this term are generally made within the framework of digital technologies that focus on the content created by users or interaction (Carr & Hayes, 2015; Kaplan & Haenlein, 2010). Howard and Parks (2012) defined social media as platforms where personal messages, news, ideas, and cultural products are presented as content in a digital environment. Examples of these include platforms such as Facebook, Twitter, Instagram, TikTok, YouTube, Reddit, or Pinterest. The innovations brought by Web 2.0 have enabled people to use social media as a new communication tool. In addition, users can convey their feelings, thoughts, and actions to other users through these platforms without time or space limitations (Güleç & Köker, 2021). The impact of media, particularly social media, on individuals' perceived reality and their interactions with it shapes worldviews and everyday experiences (Sandal, 2023).

According to the January 2023 data from the Datareportal website, the number of social media users in Turkey is 62.55 million, which constitutes 73.1% of the population. Individuals' easy access to the internet and the ongoing development and widespread use of technology are also increasing the usage of social media platforms. Especially during the COVID-19 period, when face-to-face communication was restricted, social media has become an even more important tool for facilitating communication and sharing information (Lelisho et al., 2023). The escalation of this situation and its negative impact on people's daily lives also bring about a level of social media usage that resembles addiction, as it begins to affect individuals adversely (Hou et al., 2019).

Addiction in the digital world can be defined as an individual's unconscious and uncontrolled unlimited use of technology by losing control over the use of technology (Olcay, 2018). Social media addiction can develop due to various reasons. These may include habits of spending time on social media, as well as concerns about the number of likes, followers, or social status and psychological factors such as mood disorders, loneliness, and boredom. As a result of this situation, individuals create a social identity for themselves and act within the framework of their social identity rather than their own identity (Esen & Yengin, 2021).

One of the main reasons for using social media platforms is to establish an interpersonal communication network. However, the fact that people obtain various information about others by observing and monitoring them (Fox & Moreland, 2015) forms the basis of the concept of "stalking", which has gained increasing interest recently. Although this term has entered the lives of many people through social media, it is also mentioned in the field of law. This term refers to intrusive and repetitive behaviors carried out by the perpetrator and unwanted by the victim (Meloy, 2007; Sheridan et al., 2001). In the context of social media, stalking can be defined as an individual monitoring others through social media platforms, continuously and unwantedly following or harassing them. This desire stems from the desire to access more information about people and to share this information (Bogolyubova et al., 2018). Social media stalking relies primarily on online access (Pang & Quan, 2024).

The concept of stalking includes behaviors such as repeatedly checking someone's profile or posts, sending unwanted messages or comments, and even creating fake accounts to access private information. The constant emergence of new technologies in the realm of social media makes the protection of data privacy increasingly challenging (Sales et al., 2024). In the literature, social media stalking is also referred to as social surveillance (Marwick, 2012), interpersonal surveillance (Tokunaga, 2015), and Facebook stalking (Lyndon et al., 2011). The widespread use of social media has made stalking easier and made it a tool for unwanted behaviors such as online harassment (Fox, 2016). In addition, people's desire to constantly monitor others' social media profiles and curiosity lead to impulsive participation in social media (Fox & Moreland, 2015). Pang and Quan (2024) emphasized that individuals with FoMO (Fear of Missing Out) more likely to participate in social media stalking.

Considering that students are the most active users of the Internet and have a high level of familiarity with and acceptance of new technologies (Sales et al., 2024), it can be inferred that social media usage is more prevalent among them. They prefer to choose a variety of social media platforms as their primary means of connecting with others (Zhu et al., 2023). Consequently, it can be argued that both engaging in social media stalking and being subjected to it are common occurrences among students. This situation can significantly impact students' educational lives, work, friendships and family relationships negatively. Based on this, this study aims to investigate the social media stalking situations of university students who are in a period when their awareness of responsibility for these relationships increases.

In the literature review, it was observed that there are a limited number of qualitative studies in which the participants are especially young people and their opinions about being subjected to stalking or practicing stalking behaviors. In this context, it is anticipated that investigating students' levels of engagement in stalking or being subjected to it and their opinions on the matter may serve as valuable insight for future research on how serious this situation may be among young people and contribute to the literature. In addition, it is aimed at raising awareness among the students participating in the study by taking into account the students' social media usage habits, various stalking behaviors, experiences of being subjected to stalking, and their views on this situation.

METHOD

Research Design

This study, which aims to investigate university students' social media stalking, is structured within the framework of the phenomenological design, which is one of the qualitative research methods. Phenomenology is an approach that aims to reach the essence of experiences, perceptions, or events and focuses on them in depth (Yıldırım & Şimşek, 2021). Phenomenology aims to measure, observe, and interpret the situations experienced by individuals using scientific methods.

Participants

The study was conducted with the participation of 27 university students selected using criterion sampling, one of the purposive sampling methods. In criterion sampling, the researcher tries to reach the sample size by considering certain criteria in advance (Yıldırım, 2021). The criteria used in the selection of the sample group in this study can be listed as follows: students being between the ages of 18-25, having at least one social media, actively using social media, and voluntarily participating in the study. The demographic characteristics of the participants are given in Table 1.

Table 1. *Demographic Characteristics of Participants*

DEMOGRAPHIC CHARACTERISTICS		STUDENTS	f
Gender	Female	S1, S3, S5, S7, S8, S9, S10, S11, S13, S14, S16, S17, S20, S23, S25	15
	Male	S2, S4, S6, S12, S15, S18, S19, S21, S22, S24, S26, S27	12
Most Used Social Media Platform	Instagram	S1, S2, S3, S4, S5, S7, S9, S10, S11, S13, S14, S15, S17, S19, S20, S21, S23, S24, S25	19
	Twitter	S6, S8, S12, S18, S22, S27	6
	Other (WhatsApp, Discord)	S16, S26	2
Daily Time Spent on Social Media	1-2 hours	S1, S2, S6, S9, S10, S11, S12, S13, S16, S18, S23, S24, S26, S27	14
	3-4 hours	S3, S5, S7, S8, S15, S17, S19, S21, S22	6
	5 hours and more	S4, S14, S20, S25	4
Ownership of Anonymous Account on Social Media	Yes	S4, S5, S6, S8, S14, S16, S22, S23	8
	No	S1, S2, S3, S7, S9, S10, S11, S12, S13, S15, S17, S18, S19, S20, S21, S24, S25, S26, S27	19
Engagement in Stalking on Social Media	Yes	S1, S3, S4, S5, S6, S7, S8, S10, S11, S12, S13, S14, S16, S17, S18, S19, S20, S21, S23, S24, S25, S27	22
	No	S2, S9, S15, S22, S26	5
Total			27

Research Instruments and Processes

A semi-structured interview form was used as a data collection tool in the research. A 10-question interview form was prepared to obtain detailed information regarding the investigation of students' stalking situations on social media. Before the interview form was administered, it was created based on a literature review and innovations that make it easier to follow people on social media platforms. The form was then reviewed by two experts in the field of educational technologies and finalized. Before starting the interview, the participants were informed about the study, and it was stated that the data would be used only for academic purposes and the names of the participants would be kept confidential.

As the first part of the study, demographic information questions were asked to determine the participants' gender, age, the most frequently used social media platform, the daily time spent on social media, whether they have an anonymous social media account, and whether they check the accounts of people they know or do not know on social media in the first section of the interview form. The second section of the form included questions about the stalking situation of the participants, whether they were subjected to it, and their views on stalking.

The interview questions asked in the second part of the study aimed to reveal the participants' own experiences regarding stalking, the emotions evoked by this situation, the reasons for engaging in stalking, the potential impact of stalking on people, its consequences, the effect of social media on stalking, and the measures that can be taken against it.

In the present study, the interviews were conducted by the researcher at a mutually agreed-upon time, considering the availability of the students. The interviews were conducted online via Zoom and Microsoft Teams platforms. Each interview lasted approximately 10–15 minutes. The students were informed about the research in advance, and their permission was obtained to record the interview via video or audio recording.

Data Analysis

The collected data were analyzed by the content analysis method. While the participants' own experiences were presented as word clouds, the opinions on social media stalking were presented under seven different themes based on the codes made in three categories.

Before starting the data analysis process, the collected data were reviewed. Interviews with 27 participants were video recorded with the consent of the participants, and these recordings were converted into a Microsoft Word document by the researcher and transcribed word by word. Each participant was assigned names starting from S1 to S27. Participants with different demographic characteristics were included in the study to increase the external validity of the research. Since the data collection process was conducted online, the participants participated in the research in an environment where they felt comfortable.

Participants' views on stalking on social media were categorized under themes, and common expressions were grouped. Codes were first defined, and then themes were determined. The researcher tried to group the common views of the participants in a reasonable way.

The obtained data were compared with the interviews conducted with the participants to verify their accuracy. To ensure internal reliability, the data were described and presented without interpretation. In the findings section, direct quotations from the participants were included. In addition, the data were analyzed by both the researcher and another field expert. In order to increase validity and reliability, the interviews were video recorded and various notes were taken by the researcher. During the transcription process, each word was written meticulously. In order to support the reliability of the research, the findings were confirmed with various sources in the literature.

Ethic

Ethics Committee: Niğde Ömer Halisdemir University Ethics Committee.

Date: 15/05/2023

Meeting number: 07

Decision number: 2023/07-10

FINDINGS

This study aimed to investigate university students' social media stalking situations. In presenting the findings of the study, the opinions on social media stalking were initially coded through content analysis. The results were categorized under three main themes: opinions on the impact of social media stalking on people, opinions on the impact of social media on stalking, and opinions on preventive measures against social media stalking. These themes were further divided into seven sub-themes: violation of personal life, becoming addicted, accessibility, normalization, privacy settings, personal measures, and official measures. Subsequently, participants' own experiences regarding stalking were visualized with word clouds, categorized under three themes: accounts they stalk on social media, reasons for engaging in stalking on social media, and feelings when subjected to stalking on social media.

Participants' Opinions on Social Media Stalking

In this part of the research, the opinions of the participants on what effect stalking on social media can have on people, the consequences of this, the effect of social media on stalking and the measures that can be taken against this situation are given. Different codes were obtained as a result of the interviews with the participants. Seven different themes were obtained by organizing these codes in the framework of predetermined categories. Themes and categories are given in Table 2.

Table 2. *Categories and Themes Formed as a Result of Coding*

Categories	Themes
1. Opinions on the Impact of Social Media Stalking on People	Violation of Personal Life Becoming Addicted
2. Opinions on the Impact of Social Media on Stalking	Accessibility Normalization
3. Opinions on Preventive Measures Against Social Media Stalking	Privacy Settings Personal Measures Official Measures

According to this table, the participants stated that stalking on social media invades people's personal lives and if it is excessive, it may cause addiction. Regarding the impact of social media on stalking, they mentioned that almost everyone has easy access to these platforms, leading to an increase in stalking. In addition, some participants mentioned that this situation is gradually becoming normalized. Regarding the measures that can be taken against stalking, the participants argued that privacy settings should be reviewed, and personal measures should be taken if necessary. Apart from these cases, people stated that official measures should also be taken against excessive stalking.

1. Opinions on the Impact of Social Media Stalking on People

In this category, the participants expressed their opinions on the impact of social media stalking on people. The total number of codes in this category is 47. Based on the codes, two themes were obtained under the names of "Violation of Personal Life" and "Becoming Addicted". The codes are given in Table 3.

Table 3. *Impact of Social Media Stalking on People*

Themes	Codes	Number of People	Number of Coding
Violation of Personal Life	Private Life	11	13
	Annoying	10	12
	Harassment	4	4
Becoming Addicted	Obsession	7	9
	Addiction	6	6
	Jealousy	3	3

Violation of Personal Life

The theme of violation of personal life focuses on the impact of social media stalking on people. Participants consider excessive stalking of individuals on social media a violation of their personal lives. They stated that individuals' private lives started to be scrutinized with the widespread use of social media, and this situation was annoying. S19 commented on this issue: *"Excessive stalking is a kind of harassment in my opinion, it is annoying that personal lives are followed to such an extent."* S16 said, *"I think that social media lives are more noticeable than real lives,*" while S15 stated, "*The fact that someone is constantly monitoring people prevents them from opening up their own lives."* and referred to the individuals who want to share on their social media accounts but think that they will face the negative effects of stalking.

Becoming Addicted

The participants stated that if individuals engage in excessive stalking, this situation may become an obsession and turn into an addiction. They stated that the main reason for this is a sense of curiosity, and that both the stalker and the stalked person will be negatively affected by this situation. The opinions of S13 and S5 on this subject are as follows:

S13*: "In excessive stalking, sometimes people exaggerate their curiosity too much, and it leads to addiction. The stalker can see that someone is posting from someplace and can constantly go there and chase after them in real life. They can be obsessed."*

S5: "*They may overestimate that person, placing them at the center of their focus. I think this can* *harm them both in their private lives and social lives."*

2. Opinions on the Impact of Social Media on Stalking

In this category, the opinions of the participants on the impact of social media on stalking were stated. The total number of codes in this category is 49. Based on the codes, two themes were obtained under the names "accessibility" and "normalization". The codes are given in Table 4.

Table 4. *The Impact of Social Media on Stalking*

Themes	Codes	Number of People	Number of Coding
Accessibility	Easiness	17	26
	Reachable	10	13
Normalization	Widespread use	5	5
	Legality	4	5

Accessibility

It was stated by most of the participants that the fact that social media is more accessible today with the development of the Internet provides a great convenience for people to do stalking. The participants stated that the fastest and easiest way to access information about a person is social media, and as a result, the act of stalking is much simpler, and negative situations may arise.

S10: "*Before people were doing research themselves, they were even spying on others. Now there is no need to physically stalk someone. You can immediately find out what they are doing, where they are going, and who they are talking to, all at the touch of a phone*."

S27: "*The existence of social media already makes it easier; it happens even in the simplest things. Who is this person? What's their deal?"*

Some participants discovered the concept of stalking through social media and suggested that social media paved the way for stalking.

S14: "*I discovered the concept of stalking on social media; I did not know such a thing before. The fact that people can surf whenever they want, for example, makes access easier."*

S12: "*Thanks to the easy access to social media, stalking is already possible. Without social media, it is a little more like being a pervert*."

Participant S7 addressed the access brought by anonymity in social media with the comment, "*It has become an environment where people can be secretive; they can now do stalking easily. They can open fake accounts, and after looking at something, for example, stories, they can block the account so that it does not appear."*

Normalization

Some participants stated that this situation has become normalized due to the widespread stalking on social media, while others said that excessive stalking cannot be a completely normal situation. In this case, the participants again referred to the privacy of personal life. The comments of S6 and S9 on this matter are as follows:

S6: *"This is a kind of spying. Now, even a five-year-old child can do this behind your back, it has become normalized in society..."*

S9: *"I think it can limit people's personal space of freedom, it is not a normal thing, I would be uncomfortable with it. If the other person does not want it, it should be accepted by the other party."*

In addition, some of the participants mentioned that stalking has become a normal situation because it is legal in social media. S2's comment on this matter is as follows:

S2: *"The fact that everyone can follow or access anyone makes people uneasy. Since you cannot* *follow them on the street, this time they can follow them on social media. I think it is a very dangerous kind of legalization."*

3. Opinions on Preventive Measures Against Social Media Stalking

In this category, the opinions of the participants on what measures can be taken against being stalked on social media were stated. The total number of codes in this category is 29. Based on the codes, three themes were obtained under the names of "Privacy Settings", "Personal Measures" and "Official Measures". The codes are given in Table 5.

Table 5. *Preventive Measures Against Social Media Stalking*

Themes	Codes	Number of People	Number of Coding
Privacy Settings	Account privacy	10	12
	Protecting personal information	4	10
Personal Measures	Be careful of posts	3	3
	Getting support	1	1
Official Measures	Law enforcement	2	2
	Companies	1	1

Privacy Settings

The majority of the participants stated that the most important measure that can be taken against social media stalking is for individuals to review their privacy settings on social media. According to the participants, using private accounts and not sharing personal information in the accounts can be a solution against stalking. They said that individuals who use a public account and constantly share their personal information cause being uncomfortable stalked by other people. The comments of S19 and S22 on this subject are as follows:

S19: *"It is an uncomfortable situation if the account is public and if appears on the Explore page, you can already find yourself in all social media networks, so you can be stalked more."*

S22: *"Especially location, address, email or phone numbers make it very easy and dangerous, it varies from person to person. Privacy settings should be adjusted so that your e-mail, address, or phone number cannot be viewed by someone else."*

Personal Measures

Some of the participants argued that privacy is not a solution alone and that other measures should be taken personally. For example, S17's comment "*Even when the account is private, these accounts can be accessed from different sites. I think it is necessary to pay more attention to the shared content rather than having a private account."* and S24's comment *"There are many people on social media whose mental health we are not aware of. People have their responsibilities; private photos should not be shared, or they can impose restrictions."* both highlight that individuals should be careful about the content they share. S20 made the following comment about individuals sharing their personal information: *"We can no longer protect our personal information; our lives are spreading more openly with technological developments. If an individual shares personal information, where he/she is or such things, I think that person could be subjected to stalking."*

In addition, S27 mentioned that excessive stalking may have negative effects and that support should be sought in this case; "*There are malicious people after all. If it turns into a negative situation like harassment and so, for the person being stalked, I think measures should be taken. Psychological support can be taken.*"

Official Measures

Some participants stated that no matter how many measures are taken by individuals, the person who wants to stalk will try every possible way, so law sanctions should be imposed in this regard. There was also a participant who mentioned that social media companies should also take some measures to prevent stalking. S25's comment on the official measure is as follows;

"People can still open fake accounts like their own and stalk others, so how effective are the measures taken? Maybe law enforcement can be increased more."

Participants Experiences Regarding Social Media Stalking

In this part of the study, the participants' own experiences with social media stalking are included. The data obtained were visualized with word clouds by determining three categories the accounts that the participants stalked on social media, the reasons for stalking, and their feelings in case of being subjected to stalking.

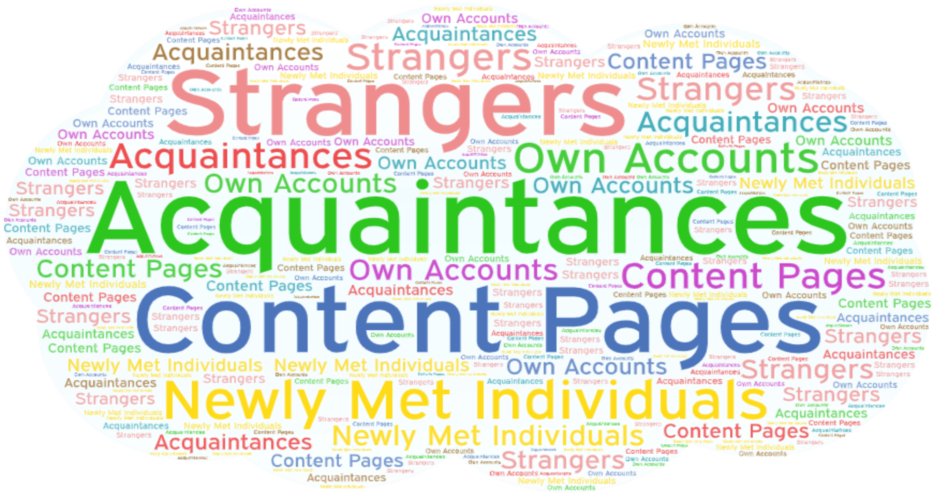

Figure 1. *Accounts that the participants stalked on social media*

As seen in Figure 1, the people that the participants stalk most on social media are acquaintances. These include friends, relatives, and close circles. Secondly, the accounts they stalk the most are content pages, news accounts, magazine, technology, or entertainment pages. On the other hand, some participants answered that they do not engage in social media stalking.

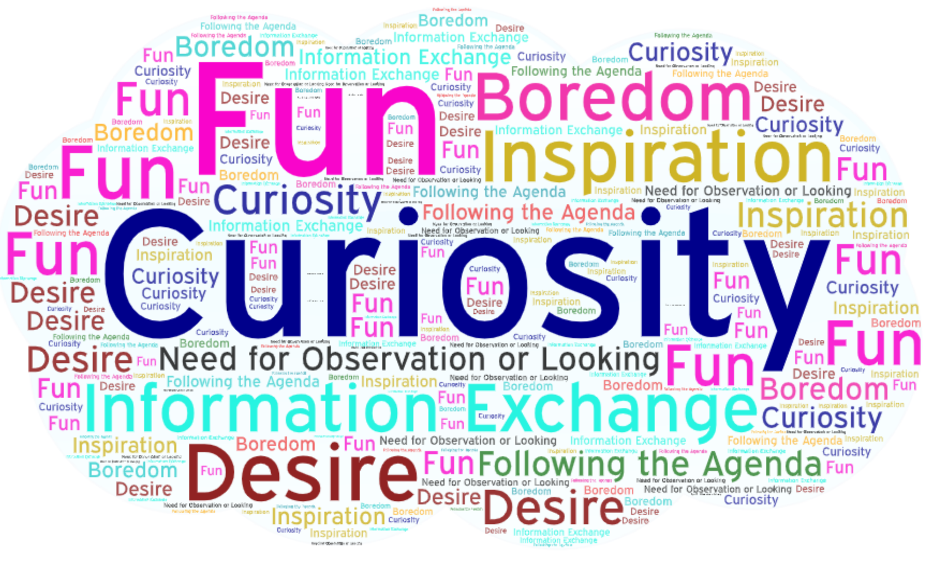

Figure 2. *Participants' reasons for stalking on social media*

In Figure 2, the reasons of the participants for stalking on social media can be seen. Most of the participants stated "curiosity" as the main reason. S6's comment on curiosity is as follows; *"After all, we reflect our selves on those social media accounts ... society is becoming more curious, they want to know* *things about everyone."*

In addition, users who follow content pages also stated that they stalk these accounts for information exchange and fun.

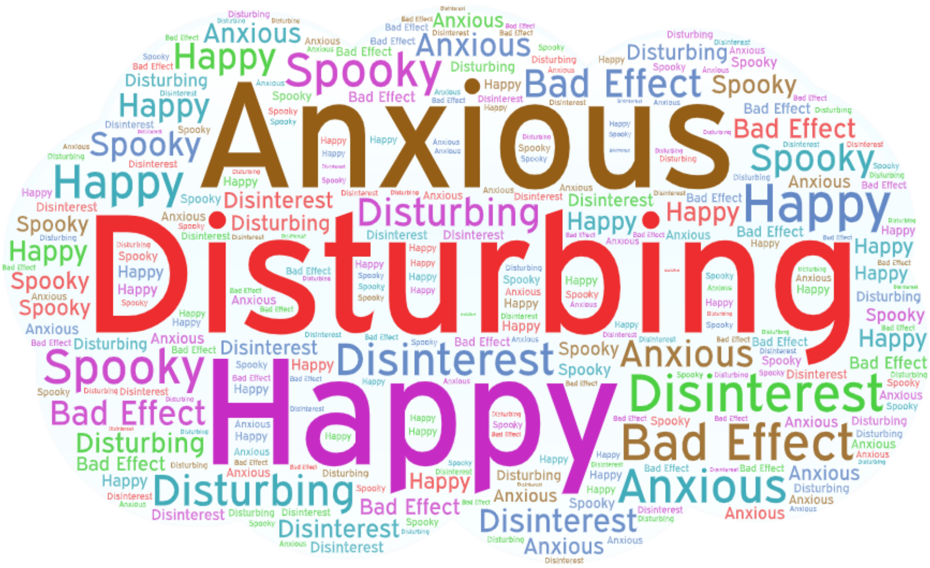

Figure 3. *Participants' feelings in case of being subjected to stalking on social media*

The emotions of the participants in case of being subjected to stalking on social media are given in Figure 3. Accordingly, while the participants frequently expressed that they were disturbed by this situation, they also stated that this situation made them feel anxious. S9 stated this situation as follows; *"I was constantly blocking an account and from about thirty-five, forty different accounts, the person was sending me requests again and again in a disturbing way. ... I had already blocked their account. Of course, it was disturbing because they were stalking me from a different account."*

On the other hand, the participants who are the social media managers of some pages and share the places they have travelled or their works on their accounts stated that they felt happy in case of stalking.

S4: *"Honestly, I feel happy, they have seen our works and they are inspired by us."*

S8: "*It makes me happy when people visit my profile and see that I have achieved something."*

DISCUSSION AND CONCLUSION

One of the problems that have emerged with the digitalization of the world is the concept of stalking, which has recently gained popularity on social media. With the increasing spread of these platforms, accessibility and reach for personal information have also increased. The fact that mostly young people prefer social media means they are affected the most by the problems that may occur. Especially with the common prevalence of stalking among young people, it can become a serious problem. In this study, the stalking situations of university students and their opinions about them were analyzed.

Analyzing the participants' opinions on social media stalking, seven different themes emerged based on the codes made under three categories. While there are themes of violation of personal life and becoming addicted in the opinions of the participants about the impact of social media stalking on people, there are themes of accessibility and normalization in the opinions about the impact of social media on stalking. Finally, there are the themes of privacy settings, personal measures, and official measures in the opinions on the preventive measures against social media stalking. Participants believe that social media brings personal lives to the forefront and consider stalking to be against the privacy of personal life. Swenson-Lepper and Kerby (2019) also state that one of the biggest ethnic problems on social media is privacy. The privacy of individuals is becoming freely accessible to everyone in the age of surveillance and consumption (İsmayilzada & Topçu, 2019). In the theme of becoming addicted, the participants stated that excessive curiosity can lead to stalking, and as a result, both sides can be negatively affected. If this situation cannot be prevented, the addiction may lead to problems such as anxiety disorder, depression, and insomnia in individuals (Hou et al., 2019). According to Dhir et al. (2021), it was revealed that the act of stalking other students between the ages of 18 and 25 caused excessive social media use, and this situation came to the point of addiction in individuals and negatively affected their sleep quality. The age of technology we live in offers easy accessibility, so interest in social media is increasing day by day (Özdemir, 2019).

In the study, the participants' opinions on the impact of social media on stalking show that the opportunity of access provides a great convenience, and therefore this convenience leads to the act of stalking. According to Fox and Moreland (2015), the "friends" tab on Facebook provides great convenience in discovering an individual's communication network. In addition, a participant stated that social media is the fastest and easiest way to obtain information about others, thanks to its accessibility, and that individuals can easily become anonymous. Swenson-Lepper and Kerby (2019) mentioned that the anonymization of individuals can be considered a major problem in the context of privacy and stalking. Some of the participants think that the concept of stalking has become normalized, or, in other words, legalized, with the introduction of social media into our lives. On the other hand, some participants believe that being stalked can limit a person's personal space of freedom and do not perceive this concept as normal.

Finally, the theme of privacy settings comes to the fore in the opinions of the participants on the preventive measures that can be taken against stalking on social media. Participants emphasized account privacy in preventing stalking. According to the participants, using a public account causes people to be stalked. In the research conducted by Güleç and Köker (2021), participants also mentioned that they stalked accounts that were not private. According to Koç's (2019) research finding, in which the phenomenon of digital security in Turkey is discussed, 43% of the participants stated that their social media accounts are public. Koç (2019) mentioned that the desire to be recognized and seen on these platforms is considered more important than the privacy of private life. In this study, the participants stated that it is also important to protect the personal information in the accounts. Haron and Yusof (2010) stated that the act of stalking has a positive aspect in promoting caution in sharing personal information on social media. In addition to privacy, participants stated that other measures should be taken against being stalked. These measures include being careful about the content shared and seeking support from the individual's trusted circle in case they experience negative effects. In cases where these measures are insufficient, participants stated that law enforcement should be initiated, and social media companies can also take measures against stalking.

Examining the participants' experiences regarding stalking on social media, it can be said that the majority stalked other accounts on social media, and these accounts mostly belonged to the participants' close circle or content pages. In addition, some participants stated that they also stalked individuals they had just met. The fact that individuals stalk a person they have just met shows that they use this behavior as a means of socialization and that they do it to increase the interactions between them (Güleç & Köker, 2021). Participants stated that they engage in stalking mainly out of curiosity, seeking information, inspiration, or entertainment motives. In a study conducted by Tokunaga (2011) with romantic partners, emotions such as insecurity and jealousy trigger individuals to collect information about what their partners are doing on social media, which leads individuals to stalk their partners regularly. In another study conducted in this context, individuals stated that they also used social media to obtain information about the lives of their ex-partners (Lyndon et al., 2011).

In addition to the fact that people stalk what they are curious about others on social media, individuals who are subjected to this situation may experience a sense of anxiety or insecurity or face problems such as privacy violations, discomfort, and security concerns. In this study, students stated that when they were subjected to stalking, they were mostly feeling disturbed and anxious, and that it had a bad effect on them. In another study, it was revealed that participants experienced anxiety, depression, and excessive alertness as a result of stalking (Haron & Yusof, 2010). In another study (Swenson-Lepper & Kerby, 2019), students expressed that they were concerned even about the possibility of university institutions examining students' social media accounts. These results emphasize the potential harms of stalking young people. On the other hand, participants who share their work or use a business account stated that in cases of being stalked, they feel happy that people see their achievements. Receiving likes, comments, and shares on social media posts can increase self-confidence and give a sense of approval (Kuss & Griffiths, 2017). Tandon et al. (2021) mentioned that the sense of happiness arising from social media may cause another social media problem, and therefore, there is a need for research on this matter.

RECOMMENDATIONS

Although the interactions on social media may go unnoticed, they serve as a kind of tool for the act of stalking, and it is difficult for individuals to avoid this act (Lyndon et al., 2011). Stalking is a serious problem, especially for the young generation, who are exposed to social media the most. The new features of social media platforms make it much simpler for individuals to engage in stalking. If this is not prevented, this action may turn into an addiction and have negative consequences for both parties. It can cause psychological and emotional problems for the individual subjected to stalking.

In this study, university students' stalking situations were investigated, and various suggestions were made on the subject. Stalking should be prevented before it reaches an addiction level, and individuals can receive psychological support in this regard. Restricting the time allocated to social media can also be a solution. In addition, various awareness-raising activities can be carried out for both the stalker and the individuals subjected to them. Individuals should revise their privacy settings and friend lists on social media accounts and be more cautious about people they do not know on social media. In addition, personal information should be limited. Individuals who experience emotional and psychological problems as a result of stalking should be supported by trusted people. If this situation is excessive, legal remedies should be applied if necessary. Apart from individuals, social media companies should also take various measures and provide users with methods to defend themselves against stalking.

For future research, stalking situations can be investigated in high school-level youth. Individuals' experiences of being subjected to stalking and the methods they follow in response can be examined within the framework of a case study.

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How Should Multicultural Education Be According to Preschool Teachers?

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ABSTRACT

The aim of this study is to reveal preschool teachers' views on how multicultural education should be presented/implemented in preschool education The study was organized in a multiple case study design from qualitative research methods. Participants were selected through purposive sampling and four preschool teachers with at least one student from different cultures were included in the study. Data were collected through semi-structured interviews and analyzed using the descriptive analysis method. The findings are given under the themes of curriculum, teacher characteristics in multicultural environments, family involvement, learning environment and evaluation according to preschool teachers. The findings revealed that children from different cultures have deficiencies in language development and social-emotional development. In addition, it was emphasized that the personality traits of a preschool teacher in a multicultural education environment should be impartial, unprejudiced, and inquisitive. Finally, the study demostrated the significance of families' active involvement in the process, the requirement for organizing learner centers according to the needs and the value of individualizing student evalutions.

Okul Öncesi Öğretmenlerine Göre Çokkültürlü Eğitim Nasıl Olmalıdır?

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ÖZ

Bu araştırmanın amacı okul öncesi öğretmenlerine göre çokkültürlü eğitimin nasıl olduğunu ortaya çıkarmaktır. Çalışma nitel araştırma yöntemlerinden çoklu durum çalışması deseninde düzenlenmiştir. Katılımcılar amaçlı örneklem yoluyla seçilmiş ve en az bir farklı kültüre sahip öğrencisi bulunan dört okul öncesi öğretmeni çalışmaya dahil edilmiştir. Veriler yarı yapılandırılmış görüşmeler ile toplanmış ve betimsel analiz yöntemi ile analiz edilmiştir. Bulgular okul öncesi öğretmenlerine göre eğitim programı, çokkültürlü ortamındaki öğretmen özellikleri, aile katılımı, öğrenme ortamı ve değerlendirme temaları altında verilmiştir. Bulgular farklı kültürlerden gelen çocukların dil gelişiminde ve sosyal duygusal gelişiminde eksikliklerinin olduğunu ortaya çıkarmıştır. Bunun yanı sıra çokkültürlü eğitim ortamındaki bir okul öncesi öğretmeninin kişilik özelliklerinin tarafsız, önyargısız ve araştırmacı olması gerektiği vurgulanmıştır. Son olarak, araştırma ailelerin sürece aktif katılması gerektiğini, öğrenme merkezlerinin ihtiyaca göre düzenlenmesi gerektiğini ve öğrenci değerlendirmelerinin bireysel olması gerektiğini ortaya koymuştur.

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INTRODUCTION

Culture refers to the system of beliefs, values, traditions, and language that shape the behavior of individuals and groups. At the core of this structure is the dynamic nature of culture as there is a constant state of interaction and mutual exchange between people and cultures (Gay, 2000). Emphasizing the differentiation of culture, House et al. (2002) argue that culture provides a trait-based categorization that distinguishes society from other social groups and enables it to evolve. This statement points to the existence of different cultural groups in society. The recently emerging concept of multiculturalism refers to the coexistence of various cultures at the same time. Contrary to the relative newness of this concept, multiculturalism has always existed throughout history. In the ongoing history, cultures have manifested themselves not in a disconnected way, but in a way in which people from different groups interact with each other, change each other, and undergo changes within themselves (Çelik, 2008).

Multicultural education is a reform movement designed to make significant changes in the education of students, including equal educational opportunities for all children regardless of their ethnicity, race, social class, gender, or cultural characteristics (Banks, 2001). In a globalizing world, different social groups and diversities should be addressed on the platform of education as the only way forward. One of the prominent aspects of multicultural education is the potential to increase social tolerance by enabling students to get to know different ethnic and cultural groups closely (Rhoads & Solorzano, 1995). Therefore, it can be understood that multicultural education has an inclusive effectiveness in ensuring social well-being, understanding, and respect.

Türkiye has been receiving intensive migration in recent years for various reasons such as the Syrian civil war the and Russia-Ukrainan war etc. According to data from the General Directorate of Lifelong Learning (2021), Department of Migration and Emergency Situations, the number of Syrians of education age with temporary protection status in Turkey alone is over 1.1 million. Approximately 731 thousand of this population are actively enrolled in preschool and elementary education. Once other nations who emigrated to Türkiye considered it can be seen how much multicultural education has become significant. Multicultural education requires a concentrated curriculum and prepared teachers (Banks, 2001). The Ministry of National Education has been trying to develop the system to integrate multicultural children, but still, there is a need for more effort and improvement. In addition to that, teachers should be prepared to teach multicultural children.

The problems and deficiencies encountered in multicultural education in the world and our country manifest themselves in many areas. In a study conducted in Malaysia with 854 preschool teachers, the problems encountered in multicultural education practices were examined. The results/findings demonstrated that teachers had difficulties in these practices in terms of instructional difficulties, insufficient resources, lack of stakeholder support and linguistic problems (Phoon et al., 2013). Another study focused on preschool teachers working in multicultural preschools in Sweden. The findings revealed that cultural and religious differences led to dilemmas and friction between children, preschool teachers, and families, and that the preschool curriculum was insufficient to provide guidance (Stier & Sandström, 2018). Amini (2011) examined the views of preschool teachers, parents, and a school principal on parental involvement in multicultural preschool settings. The findings show that language and communication problems, different understandings of childhood, and cultural differences in perspectives on child-rearing pose barriers to parental involvement. Ateş and Şahin's study (2021) encompassing preschool teachers working in Diyarbakır province demonstrated that the number of teachers who planned to address multiculturalism in the classrooms was quite low and that teachers could not associate some of their practices with multiculturalism and respect for differences. As evident in this study, the main reasons for the problems experienced in multicultural preschool education environments are language problems, cultural differences, deficiencies in educational programs, and inadequacies in teachers' knowledge and practices.

Özdemir (2009) explains that education policies in a country can be carried to life through the curriculum. Accordingly, policies towards multicultural education in countries should be reflected in their curricula. Although the issue of multicultural education is not directly addressed in the preschool curriculum published by the Ministry of National Education in 2013, the title "Takes Cultural and Universal Values into account" is among the basic features of the program. Under this heading, the sub-headings of 'recognizing the values of the society in which children live', 'adopting cultural and universal values', 'respecting differences', and 'encouraging children to gain experiences to live in harmony with people with different characteristics' are emphasized. The characteristics of respecting differences and explaining different cultural characteristics are emphasized in the achievements and indicators of the program. The program includes a statement about teachers taking socially and culturally disadvantaged children into consideration when planning Turkish language activities. Apart from these, no detailed information that could be related to multicultural education was found. Our country's policies towards multicultural education have recently been on the agenda. For example, Türkiye's inclusive education policy has been on the agenda since 2011 in response to the migration of Syrians to Türkiye (Özcan, 2018). However, the reflection of such policies on curriculum may take time since there are not enough studies on the subject. For instance, under the MoNE (The Ministry of National Education), the General Directorate of Lifelong Learning developed a specific Department of Migration and Emergency Situations for Syrian children. The MoNE issued two circulars titled "Measures for Syrian Citizens Residing Outside Camps in Our Country" and "Education and Training Services for Syrian Citizens Under Temporary Protection in Our Country" between April 20, 2013, and September 26, 2013, after which institutional measures were implemented (Karaoğlu & Özbay, 2022). For this reason, conducting research related to multicultural education in relation to the preschool curriculum can be effective in finding a place in the program for guidelines on multicultural education.

Children's developmental characteristics reveal why multicultural education should be provided at an early age. Ramsey (2004) stated that toddlers can make racial and gender distinctions. Palmer (1990) also asserted that a 3-year-old child can notice changes in skin, eye, and hair colors. This developmental feature shows that children are open to prejudices at an early age. The findings of a study conducted in Korea showed that preschool children have a negative view of their peers from multicultural families (Kyun et al., 2015). The diverse attitudes of the society in which children live may also cause them to show sensitivity to these attitudes. According to Bandura's (1977) social learning theory, it should not be forgotten that children observe the behaviors, reactions, and attitudes of the people around them and imitate them by taking them as models. For this reason, anti-bias teaching, which is one of the basic approaches of multicultural education, should be taken as a basis in preschool education. This approach aims to eliminate children's negative stereotypes about race, language, gender, etc. and to help them recognize differences and values through empathy (Derman-Sparks, 1989).

Bertrand (2012) stated that a preschool curriculum is necessary for the systematic continuation of preschool education and constitutes the child's first learning experiences in the field of cognitive, physical, emotional, self-care, and language skills. Since preschool education should be appropriate to the needs and individual differences of the child (MoNE, 2013), it is necessary to update the curriculum by taking multicultural education environments into consideration. Teachers play a leading role in providing quality education. A teacher is a person who constantly interacts with students, plans, and implements educational content, and evaluates students and the educational process in a multidimensional way (MoNE, 2017). In determining the quality of the multicultural education environment, factors such as teachers' educational practices, attitudes and behaviors towards different cultures, knowledge, teaching methods and techniques, and classroom management skills come to the fore.

The "main carrier" of preschool education potential, the transmitter of behavioral and cultural norms and values is the teacher. Whether a preschool teacher can overcome his/her own prejudices and stereotypes, develop tolerance, cope with language diversity, and support the achievements of diverse learners is critical for effective multicultural education (Logvinova, 2016). In this direction, considering the key role of preschool teachers in the education of children, their perspectives, perceptions and attitudes towards multiculturalism and multicultural education are the elements that shape the multicultural education environment.

Taştekin et al.'s seminal paper (2016) investigating preschool teachers' attitudes and perceptions towards multicultural education suggested uncovered that attitudes and perceptions towards multiculturalism were positive, but teachers felt inadequate about multicultural education practices and there were deficiencies in the curriculum regarding multicultural education. In Çapçı's (2020) study, while it was understood that preschool teachers had positive attitudes towards multicultural education, it was stated that they were inadequate in classroom organization and multicultural education implementation. In this direction, while preschool teachers' positive attitudes towards multiculturalism are reflected, and they see themselves inadequate within the scope of multicultural education practices. Polat and Kılıç (2013) argue that there is not enough in-service or pre-service teacher training for multicultural education in Türkiye. For this reason, it is necessary to carry out studies to increase teacher competence in multicultural education.

It is seen that issues such as attitudes, understanding and knowledge levels towards multicultural education are focused on teachers and pre-service teachers (Bekir & Bayraktar, 2018; Çapçı, 2020; Taştekin et al., 2016; Yaşar Ekici, 2017). However, studies in which preschool teachers are in the sample group are limited. Günay and Aydın (2015) conducted research and did a content analysis of studies on multicultural education in Türkiye between 2005 and 2014. It was revealed that the attitude scale was most frequently used as a data collection tool in the studies and the sample selection was mostly made with students (Bulut & Sarıçam, 2016; Onur Sezer & Bağçeli Karaman, 2017; Özdoğru et al., 2021; Peköz, 2018; Taştekin et al., 2016; Yaşar Ekici, 2017. In this direction, it is understood that the studies in the national literature are mostly quantitative studies and the number of studies involving preschool teachers is less. The literature, which includes the studies, should be diversified with the views of preschool teachers on multicultural education, which continues to be uncertain. Therefore, this study aims to determine preschool teachers' views on how multicultural education should be planned in the preschool period. In line with the aim of the study, the following questions will be answered:

According to preschool teachers in preschool period:

- How should the preschool curriculum for multicultural education be?
- How should the preschool teacher be in a multicultural education environment?
- How should family participation be handled in multicultural education?
- How should learning environments be organized in multicultural education?
- How should evaluation be implemented in multicultural education?

METHOD

Research Design

This study was designed as a multiple case study from qualitative research methods. Case studies are descriptive, interpretative, and evaluative studies in which a topic determined in a limited area is described and examined in depth (Merriam, 2018). The current study was descriptive case study design that aims to examine the views on multicultural education in the preschool period in depth. Stake (2005) defines a case study as "representative qualitative research with a strong naturalistic, holistic, cultural and phenomenological interest". Case studies provide researchers with rich descriptions of unique cases. This study was also designed as a case study since it examined the views on how teachers with students from different cultures should be. Yin (2003) stated that case studies can be studied as both single and multiple case studies. She added that multiple case studies are generally considered more robust than single case studies because they allow researchers to analyze the phenomenon in various settings. Therefore, this study was designed as a multiple case study since each teacher's classroom, multicultural children and teaching methods are counted as a case.

Study Group

The study group of the research was determined through criterion and convenience sampling, two of the purposive sampling types. Purposive sampling is based on the necessity of selecting a sample that the researcher wants to explore, understand, gain insight, and learn most things (Merriam, 2018). In studies using criterion sampling, observation units can be formed from people, events, objects, or situations with certain qualities (Büyüköztürk et al., 2023). This study aims to examine the views of preschool teachers on how multicultural education should be in the preschool period. In line with this aim 4 preschool teachers who had at least one student with a different culture in their class were included in the study. Stake (2005) emphasized that four to ten cases would be sufficient for multiple case studies. Therefore, four participants were deemed sufficient. The preschool teachers were given codes as (T1, T2...) within the scope of research ethics. Table 1 shows the demographic information of the preschool teachers who participated in the study.

Table 1. *Demographic Characteristics of Participants*

Demographic Information	T1	T2	T3	T4
Education Level	Bachelor's Degree	Bachelor's Degree	Bachelor's Degree	Master's degree
Age	27	30 years old	28 years old	34
Year of Service	3 Years	5 Years	4 Years	9 years
Place of Duty	Agri/Taslicay district	Bursa/ Inegol district	Diyarbakir/Bismil district	Bursa/ Inegol district
Independent Kindergarten/Primary School	Independent kindergarten	Independent kindergarten	Kindergarten attached to primary school	Independent kindergarten
Age of preschool children	5 years old	5 years old	5 years old	5 years old

The demographic characteristics of the participants presented in Table 1illustrated that T4 has a master's degree, the other teachers have bachelor's degrees, and the ages of the teachers vary between 27 and 34. The highest number of years of service was T4 with 9 years and the lowest number of years of service was T1 with 3 years. While T2 and T4 work in the Bursa İnegöl district, T1 works in the Ağrı Taşlıçay district and T3 works in theDiyarbakır Bismil district. Only T3 works in a kindergarten attached to a primary school, while the other 3 teachers work in independent kindergartens. All the children in the teachers' classes were around 5 years old. Nineteen children from different cultures were in T1's class, 8 children were in T2's class, 15 children were in T3's class and 16 children were in T4's class.

Research Instruments and Processes

Semi-structured interview tools generally consist of questions or problems to be clarified (Merriam, 2018). In this study, a semi-structured interview form consisting of questions about how multicultural education should be in the preschool period with preschool teachers was used as a data collection tool. The interview questions were utilized from the literature and formed under six categories: demographic information, preschool curriculum, preschool teacher, family involvement, learning environment and evaluation. It was determined by making use of the 'Preschool Curriculum' prepared by the Ministry of National Education in 2013. Guidelines on multicultural education in the preschool period have not yet been included in the preschool curriculum. For this reason, there was a need to associate the issue of multicultural education, which remains uncertain in the preschool period.

The interview questions were prepared by the two researchers conducting the research and then the opinions of two different experts working in early childhood education and multicultural research were received. The interview form, which was finalized with the arrangements made after the opinions were received, consists of four demographic information questions, six questions related to the program, four questions related to the teacher, four questions related to family participation, four questions related to family involvement, three questions related to the learning environment, three questions related to evaluation, and one question about whether there is any other information they would like to add, with a total of 25 questions. A sample question related to each topic can be given as follows:

- Which features related to multicultural education should be included in the preschool curriculum?
- How should the preschool teacher be in a multicultural education environment in the preschool period?
- How should family participation activities related to multicultural education in the preschool period and what should be considered?
- How should learning centers for multicultural education in the preschool period be organized/created and what should be considered?
- How should the teacher's self-evaluation of multicultural education in the preschool period be and what should the teacher pay attention to?

After contacting the teachers selected by the purposive sampling method, the researchers shared the details of the study and obtained consent forms from the volunteer teachers. The interviews lasted 45 minutes on average. During the interviews, a voice recorder was used. After the data were collected, the interviews were transcribed and sent to the participants and asked if they wanted to add or remove anything, and necessary arrangements were made in line with their requests.

Data Analysis

The descriptive analysis method was used to analyze the data in this study. Saldana (2011) emphasized that the descriptive analysis method is suitable for almost all qualitative studies and can be used for studies with a wide variety of data forms, especially interview transcripts. In this study, the themes were determined according to the main headings of the questions formed according to the literature and the MoNE program, and questions were prepared under these theme headings. After the data were collected through interview forms, they were coded according to these themes. The coding process was carried out separately by the three researchers conducting the research, and when compared afterwards, it was found that there was 99% similarity for all questions based on Miles and Huberman (1994). The different codes were discussed together and compromised under a category.

Validity and Reliability

Yıldırım and Şimşek (2008) suggested taking expert opinion to ensure reliability in qualitative studies. For reliability in this study, the two researchers who conducted the research received two different experts working inearly childhood education and on multicultural research opinions, as well as not being involved in the study, after preparing the questions. Creswell (2013) stated that participant confirmation would be useful to increase internal validity. For this reason, after the data were transcribed, they were shared with the teachers, participant confirmation was obtained, and necessary arrangements were made in line with their requests.

To increase external validity, the purposive sampling method was used as suggested by Guba and Lincoln (1982), and inclusion/exclusion criteria were included. Inclusion criteria were working in public kindergartens and teaching at least one multicultural child and exclusion criteria were in private kindergartens. Finally, to increase the objectivity of the research, it was requested to make sure that there were no researcher biases (Streubert & Carpenter, 2011). The fact that neither of the researchers who conducted this study met any of the participants before the research was conducted.

Ethic

The necessary permissions to conduct this study were obtained from Burdur Mehmet Akif Ersoy University Non-Interventional Clinical Research Ethics Committee with the decision numbered 2023/340 on 07.06.2023. In addition, all ethical rules such as obtaining the necessary permissions before, during and after data collection, adhering to the principle of volunteerism, giving the right to leave the study at any time, not answering any question, keeping private information confidential and not sharing the data with anyone were followed.

FINDINGS

The findings of the research were given under the titles of curriculum, teachers in multicultural environments, family involvement, learning environments, and evaluation in multicultural education according to preschool teachers.

Preschool Curriculum in Multicultural Education

The teachers who participated in the research stated that there were deficiencies in the preschool curriculum in the fields of language development and social-emotional development for children from different cultures. Table 2 shows the teachers' opinions regarding the outcomes and indicators they think should be included in the program.

Table 2. *Preschool Teachers' Views on Multicultural Education Related to the Preschool Curriculum*

Category	Subcategory	Codes	Participants
Gains	Language development	Acquisitions for expression	T1, T2, T3, T4
	Social and emotional development	Acquisitions related to adaptation	T4
		Acquisitions for recognizing different cultures	T2
		Acquisitions for introducing oneself	T1
Learning Process	Recommendations	Supporting family participation	T1, T2
		Daily life experience	T2
		Emphasizing gathering under a single flag	T1
		Providing experiences not available in own culture	T4
		Identification of unknown words	T3
		Education according to their readiness	T3
		From simple to difficult principle	T4
Concepts	Concepts in the foreground	Concepts related to skin/race/culture difference	T1
		Unknown concepts	T4
	Concept education strategies	Readiness	T2, T3
		Education from the known to the unknown	T3
Specific Days and Weeks	There is a change	Arrangements according to multicultural environment	T1, T2, T4
		Emphasis	T2, T4
		Preliminary preparation	T4
		Characteristics of the city/culture	T1
		Family involvement support	T1
		Embodiment	T1
	No change	Attendance in accordance with the program	T3
Field Trips	Recommendations	Places not visited before	T1, T2, T4
		Places that appeal to every child	T2
		Consideration of previous experiences	T3
		Using visual expression	T4

According to the teachers, the curriculum should include different aspects of developmental features for multicultural children. While some teachers asserted that the processes of physical and social development are the same for all children all teachers agreed that language development should vary for multicultural children. For instance, T3 said:

> In the outcome indicators, they are already progressing in almost the same course in terms of physical development or social-emotional development. Only in terms of language development, that is, the main element

> of communication, children can already express themselves by speaking. Therefore, I think language development should be main focal point.

On the other hand, T4 did not agree that language development could be the same for all children and said: "In terms of language, these children need to be taught more simple instructions to teach them Turkish or the instructions need to be simpler." Then, she added "Also, they already have difficulties in adapting to school, but since they do not know Turkish, they adapt to the classroom environment very difficult. New acquisitions can be added to that social and emotional area". Also, about social and emotional development T1 said:

> In guidance counseling, there are more comprehensive related to self-knowledge or different cultures, but in the achievement indicators of preschool, I think there are no achievements in which children can introduce and explain themselves. In general, as I said, there is recognition of different individuals, and different cultures. And that always comes especially in April week. It seemed to me that it was a little bit based on April 23rd.

Another category is the learning process. The preschool teachers participating in the study made suggestions regarding the "learning process" category in the multicultural education environment. It is seen that the participants most frequently refer to family participation while organizing the learning process. Apart from this, teachers made suggestions on planning activities that provide daily life experience in multicultural education environments, enabling children to acquire experiences that are not from their own culture, emphasizing that they are gathered under a single flag, identifying words that children do not know, providing education according to their readiness, and managing the process with an approach from simple to difficult. Excerpts related to these suggestions are given below. For family participation and daily life experience, while T1 said "When I start with myself in the learning process and involve the parents in the process and use the map, children learn that each place is a different place, the concept of the province, the concept of the district..." T2 stated that:

> For example, we have a project like I know my region this year. In our projects, we can continue by including the activities of that day in the learning process and ensuring parent participation. For example, while explaining the Black Sea region, we can ask for help from the families of our students who are from the Black Sea region, and we can include activities that students can learn and gain daily life experience in the learning process.

In addition to that, for readiness and identification of unknown words, T3 said:

> I will use something that is not grown in the culture where that child was born and raised, for example, I will use a fruit or something else. First, for example, before starting the learning process, it is necessary to test the readiness of children. Do they know this, do they know what I am going to teach? The main objects can be introduced. If there are words that they cannot understand I can convey in the learning process, and they can be identified. After they are identified, they can be transferred after the children are able to understand them comfortably.

Preschool teachers made suggestions about the concepts in the preschool curriculum related to multicultural education. Teachers emphasized the points that should be taken into consideration in concept teaching and expressed opinions that education should be given according to children's readiness. For instance, T3 said "Attention should be paid to their readiness, does this child have such a concept in his/her mind? This should be tested. Accordingly, concepts can be transferred to the child by starting from what he/she knows and proceeding from known to unknown." Further, T1 claimed that:

> I heard a word like 'black man' from one of my students, and I think he watched it on YouTube on the internet and made fun of students who had darker skin. There was a mocking situation in the classroom like 'you are black'. Maybe s/he has different skin colors, this time when you give too much detailed information to children, sometimes they use it. 'You are white', 'you are black' etc. It is necessary to provide that education very accurately.

For the "specific days and weeks" section in the preschool curriculum, three of the preschool teachers who participated in the research (T1, T2, T4) stated that arrangements should be made according to the multicultural education environment, but T3 said she did not make any arrangements, thinking that children from different cultures should adapt to the existing culture. About that, T1 stated:

> They, Azerbaijanis, celebrate Nevruz. One of my parents did this as family participation. She came and told the children what Nevruz was and who the Azeris were. They painted eggs, they boiled eggs with onion skins, and she had the children do an egg painting activity. At that time, the children, especially the students from the East, perceived it as closer to the Azeri culture and understood it better.

In addition, T4 said, "For example, in the week of the elderly, we asked them to wear clothes similar to their grandfathers and grandmothers in the week of the elderly, because Meskhetian Turks especially respect the elderly, we dressed them up, we made food close to their culture, or we made food close to their culture in the week of domestic goods." However, T3 stressed that:

> Honestly, there was a Syrian student in my class. I'm talking based on that. I didn't wonder about the culture of Syrians. Therefore, I honestly don't know whether there is such a value or not. Maybe this is my deficiency, but I focused more on the child's adaptation to our culture because this is where he/she will live from now on.

Regarding the field trips in the preschool curriculum, preschool teachers frequently said they prefer places that children from different cultures have not visited before. In addition, teachers stated that there should be places that appeal to every child, and children's previous experiences should be considered, and if field trips cannot be made in disadvantaged regions, visual expression can be used. For instance, T2 said, "It is necessary to give importance to the types of excursions that every child can be happy. For that, trips can be organized to museums that they do not know, that are different for them". Also, T1 claimed:

> For example, two students in our class had never been to the movies. After talking to the principal, children went to the cinema with a shuttle service in the center of Ağrı. We need to determine what is missing in the geography we are in, or what situations and areas where children may feel inadequate and make field trips as much as possible.

T4 said that she did not organize a field trip this year because of the disadvantage of the region where they live.

Preschool Teacher in Multicultural Education

The preschool teachers participating in the study were asked questions related to a preschool teacher in a multicultural education environment. The participants stated that the personality traits of a preschool teacher in a multicultural education environment should mostly be impartial, unprejudiced, and inquisitive. Table 3 shows the teachers' statements on this subject.

Table 3. *Preschool Teachers' Views on the Preschool Teacher on Multicultural Education*

Category	Subcategory	Codes	Participants
Preschool teacher qualifications	Personality traits	Without prejudice	T1, T2
		Neutral	T1, T2
		Researcher	T4
		Loving	T3
		Patient	T3
	Attitudes	Non-marginalizing attitude	T3, T4
		Democratic attitude	T1, T2
		Attitude that can turn a crisis into an opportunity	T1
		Patient attitude	T1
Teaching methods and techniques		Drama	T1, T3, T4
		Question-answer	T1
		Demonstration	T1, T4
		Rhythm activities	T2

Classroom management	Controlling	T2, T4
	Opportunity for children to get to know each other	T1
	Classroom management according to culture	T1
	Emphasizing classroom rules	T3

About how a preschool teacher should be while teaching multicultural children, T1 said "When a teacher enters the classroom, he/she should leave his/her political identity behind. No matter what his/her mindset and political identity are, he/she should enter the classroom knowing that the other person is just a child and a human being.". T4 stated "He should research different subjects and he should improve himself a little because he will hear things he has never heard of". In addition to that, T2 stressed that:

> We need to accept this. Everyone has their own culture, and we should not put a person who was raised according to this culture and a person who was raised according to Turkish culture in the same category. Therefore, we need to be tolerant. In other words, we need to accept each student as he/she is and realize that he/she is a child, just a student, a little child.

Another finding of the study is that a preschool teacher in a multicultural education environment should have an attitude that does not marginalize, is democratic, can turn a crisis into an opportunity, and is patient. About this finding, T1 stated that:

> In a place where there are different cultures, extra patience is needed. As I said, you don't understand the language of the child. You don't understand what they want. For example, when the child needs to go to the toilet, he/she cannot explain what he/she wants, and until he/she explains what he/she wants, he/she is pooing his/her pants [soiling]. This time, before solving one problem, another problem arises. Should I understand the emotion the child is feeling at that moment, or should I understand the problem he/she is experiencing because he/she cannot tell me his/her problem? It is a situation that requires a lot of patience.

Then, she added:

> There is not a single student there. There are 22 students. While taking care of one child, this time 21 students are left idle. It needs to be in such a situation that it really needs to turn the crisis into an opportunity and hold on to the moment.

Furthermore, T3 claimed that:

> First, children should not fit into a certain mold. The family structure and culture in which each child lives and how they grow up are different, first, it is necessary to accept this. And it is necessary to reach children without prejudice, as much as possible, that is, it is necessary not to try to put children into a category.

When the teaching methods and techniques used by preschool teachers in multicultural education environments are examined, it is seen that the drama method is used the most. While T1, T3, and T4 mentioned that using drama to teach multicultural children T2 did not point out drama in her methods. In addition to this method, it is understood that demonstration and rhythm teaching methods are also used. While, T1 said "I usually use drama because children cannot concretize the event, they cannot understand it". Also, T3 stated that:

> The child has grown up in an environment where he/she cannot express himself/herself very comfortably, where boundaries are set, or where he/she is not allowed to speak in the presence of adults. If a child has been raised in this way, when you are going to have a drama activity, that is the place where he can express himself best.

Also, T4 claimed:

> It was the Red Crescent Week. Since there is no institution like the Red Crescent in the culture where the child lives, I first made him/her watch a Red Crescent promotional video (video) because he/she does not understand what the Red Crescent does where he/she comes from. We staged a reenactment, a drama. Nurses, war wounded when the child experiences it, it stays in his/her mind more.

Preschool teachers were asked how the teacher in a multicultural education environment should manage the classroom or what they should pay attention to. In the responses received, the participants made various suggestions and frequently emphasized the need to dominate the classroom. In addition, giving children the opportunity to get to know each other, diversifying classroom management according to culture, and emphasizing classroom rules were also mentioned. For instance, T1 said:

> I am a very game-centered teacher. I can't play those kinds of games with children wearing dresses because I think that they should learn with games rather than at the desk. They jump, they do somersaults, they do cartwheels. I can't include them, and the most important thing is that the clothes the children are wearing suddenly become the talk of the class. They are doing activities, and the dress is in front of the eyes, and I'm talking about girls. I say that wearing dresses is strictly forbidden.

T2 claimed she is open to improvement and should learn from every incident he/she experiences, should control his/her class with strict rules and should be a classroom teacher who can cover all his/her students and who can be seen by all his/her students. Also, T3 stated different cultures make it very difficult for children to adapt to each other. Therefore, visualizing the classroom rules, giving them in a way that will remain in their memories, or giving them by turning them into songs, maybe would make classroom management much easier.

Family Involvement in Multicultural Education

The opinions of the preschool teachers participating in the study on family involvement in multicultural education were taken. It was found that preschool teachers organized a parent meeting at the planning stage of family involvement, organized family involvement according to parent profiles, communicated with the family and filled out a family involvement form.

Table 4. *Preschool Teachers' Views on Family Involvement in Multicultural Education*

Category	Subcategory	Codes	Participants
Family participation	Planning	Parent meeting	T1, T2, T3
		Organizing parent-specific family participation	T1, T2, T3, T4
		Communication with family	T2, T3, T4
		Family participation form	T3
	Work/Activities	Studies to transfer different cultures	T1, T2
		Studies that appeal to all children	T2
		Studies according to the materials that can be found in the family's home	T3
		Studies that families can understand	T3
		Culture characteristics	T1, T2, T3
	Home Visits	Not to disturb the family	T3
		Attitude without prejudice	T3
		Priority for children with difficulties in the adaptation process	T4
		Going with 1 extra person	T2
		The importance of home visits	T1, T2, T3, T4

According to the participants, about family involvement in multicultural education T2 mentioned that she had not even heard of Meskhetian Turks, and it’s culture, so she did not know what she had to pay attention. Therefore, she met with all my parents one by one and learned from them what importance they attach to family involvement and what kind of family involvement they want them to take part in. Then, she made plans accordingly. Also, T3 stated that:

> Since the cultures of children are different, the cultures of families are also different. Therefore, these parent-teacher meetings at the beginning are very important to get to know the families. You know, more or less a form is formed about the family structure. For family involvement, I fill out a family involvement form in my classroom, and I ask families to fill out some information forms about what they can do in the classroom. For example, what kind of structure do you have, what is your characteristic structure, do you have any skills, do you have any talents that you can exhibit in the classroom, is there anything you can teach to children, I send information forms.

In the answers received for the question of how family participation activities should be in a multicultural education environment, there are findings such as activities aimed at transferring different cultures, activities that appeal to all children, activities according to the materials that can be found in the family's home and activities that families can understand. For instance, T1 stressed that:

> We want the parents to make food belonging to that region, especially when there are different cultures during the week of domestic goods. The child brings it and explains that it is made from this, for example, 'my parent from Rize made kuymak'. The children have photos of it and they all ate kuymak from the pot. The woman said 'we make this a lot there'. This is our cheese, our cheddar cheese, this is our butter, they all grow in our province.

Regarding home visits in the multicultural education environment, findings were obtained about paying attention to the cultural characteristics of the family, not disturbing the family, having an attitude without prejudice, prioritizing children with difficulties in the adaptation process, conducting home visits with one extra person and the importance of home visits. About that, T said that:

> I think communication with the child is very effective in family participation. The child changes in an instant when you go to his/her home. The temperament of the child changes a lot, especially the children who go to the child's home. I think the emotional bond between them increases more.

On the other hand, T3 pointed out the challenge of family involvement by saying that:

> Obviously, it is necessary to solve the structure of the family. There are some families, for example the Syrian family, their home environment was not suitable. They didn't want to accept me either. Because 10 people live together in a room at home. They just didn't want me to see that environment, that's probably why they didn't want to invite me.

Preschool Learning Environment in Multicultural Education

When the answers to the question of how learning centers should be or what should be considered in a multicultural education environment were examined, it was found that preschool teachers organize learning centers according to needs, change learning centers only on special days, refer children to different centers, think that there should be a comfortable environment and do not need any regulation.

Table 5. *Preschool Teachers' Views on the Learning Environment in Multicultural Education*

Category	Subcategory	Codes	Participants
Learning environment	Learning center	Learning center according to need	T4
		Change of learning center on special days	T2
		Refering the child to different centers	T1
		A comfortable environment	T2
		There is no regulation	T3
		Materials according to culture	T1, T2, T4
	Materials	Materials for the needs of the child	T1, T4
		Natural and real materials	T1, T2
		Materials that appeal to every child	T2
		Materials she/he has not seen before	T1
		Non-uniform materials	T1

For learning environment in multicultural education, T1 stated:

> When a child has had enough of one type of toy, the teacher should put the toys away and say, "Come on, let's see what you can do with these toys today, let's try them". Because after a while, the child wants to play that game or toy in that center where they feel safe because they only know it. After a while, it would be beneficial for the teacher, at least for the child, if he/she put them away and directs the child by saying, let's see, your job is to find this week's toys and what you can do with them.

In addition, T2 claimed that teachers can make changes or additions in the form of family participation or in the subjects, teachers deal with on certain days or weeks on more special days by addressing topics in different cultures. It does not have to be continuous, but they can add or subtract certain periods culturally. T4 said "There is something very important for them, for their own needs, for their deficiencies, or there is something they want to explain a lot in their own culture. This center can be planned accordingly."

Preschool teachers were asked what kind of materials should be used or what should be considered in a multicultural education environment. The responses included materials according to culture, materials for the needs of the child, natural and real materials, various materials, materials that appeal to every child, materials that have not been seen before, and materials that are not uniform. For instance, T1 said "There is a child who are from the Black Sea region called ‘Laz’ in my class. If there is a toy in the classroom where they collect tea leaves, maybe he can show the children how to do this." Also, T3 stated "In terms of materials, children actually recognize most things. The materials are a little more universal. For example, if the child has not seen it at home, maybe such a thing can be introduced."

In addition, T2 said that:

> There should be materials that every child can participate in. I mean, every child plays with cars. Every girl child, but over time, so many components should be common, over time, according to the class dynamics, we can add according to the cultural structure of the student potential in the class.

Lastly, T4 stressed that:

> A simple puzzle is very boring for a child who grew up in our culture, while a simple puzzle is very complicated for a child who has never seen it and tries to improve himself/herself. In fact, a different environment can be created by diversifying, grading, making it harder, making it easier.

Assessment in Multicultural Education

The element emphasized by the participant teachers in the evaluation of the child in the multicultural education environment is individual evaluation. Then, findings emerged in the form of evaluating the child's adaptation and language development. The teacher coded as T1 did not express any opinion on evaluation. The prominent factor in the self-evaluation of the teacher is the inclusion of the child in the learning process. Teachers coded as T1 and T3 did not comment on the teacher's self-evaluation section.

Table 6. *Preschool Teachers' Views on Evaluation in Multicultural Education*

Category	Subcategory	Codes	Participants
Assessments	Assessment of the child	Individual assessment	T2, T3, T4
		Evaluating adaptation	T4
		Evaluating language development	T4
	Teacher self-assessment	Including in the process	T2, T4

The last but not least, about assessment in multicultural education, T3 said "If the child's readiness is very weak, it is necessary to make an evaluation accordingly. In other words, every child may not get the same achievement at the same rate. This can be taken into consideration in the evaluation”. T2 gave an example about that:

> My student from a different culture was very emotionally worn out in the activity that day. Let me say that this issue caused a negative behavior for my student. It is necessary not to address this program in the next month or to take another concept to improve it.

T2 stated that:

> I think the teacher should ask this. Did I reach all my students during the learning process? Did I involve all my children in the subject? Did I ensure the participation of my children, did I attract their attention? Did my student from a different culture sit still or did I include him/her in the learning process? Was I able to inform that student about this issue? Was he/she able to participate in the training? I think teachers should ask themselves these questions.

DISCUSSION AND CONCLUSION

As a result of semi-structured interviews with four preschool teachers, it was concluded that the achievements and indicators in the preschool curriculum should focus on language, social and emotional development. Children's communication with their teachers and peers is important in the education process.

However, preschool teachers with children from different cultures stated that the language differences between themselves and the children caused some problems. In the preschool curriculum, it is stated that the aim is to ensure that children speak Turkish correctly and beautifully (MoNE, 2013). It is understood that teachers who have language difference problems have difficulty in fulfilling this principle, which is the main purpose of the program. Çiçek (2019) found that the most important problem with immigrant children in preschool education institutions is the inability to meet in a common language. It is seen that the problems encountered in multicultural education environment are generally language differences. At this point, for preschool children with language problems to adapt, second language acquisition, which is called the sequential acquisition of languages, should be focused on. On the other hand, language problems also bring along problems in social and emotional development. Children who have difficulty expressing themselves may experience adjustment problems (Mercan Uzun & Bütün, 2016; Yohani, 2010). It is also seen in the study of Kardeş and Akman (2018) that language and adaptation problems are experienced together. In this study, teachers stated that the most common problems were in the field of language and social development and emphasized that the achievements and indicators in the field of language, social and emotional development in the preschool curriculum should be organized according to multicultural classes.

Two of the teachers participating in the study stated that the learning environment in multicultural education should be supported by family participation. Research (Jeynes, 2005; Jung & Zhang, 2016) indicates that when parental involvement in the activities of preschool children from different cultures is high, children's academic achievement also increases. On the other hand, one teacher stated that a learning process should be designed to emphasize that they live in the same country. This view suggests that children with different cultures should not be segregated and should be seen as a whole. Growing up in a monoethnic environment is one of the main reasons for the emergence of a strong tendency towards differentiation and polarization when children from different backgrounds are gathered under the same roof (Yusof et al., 2014). In preschool education institutions, which are the first step of basic education, it is the duty of preschool teachers to provide all the skills and knowledge that new generations will need to live together with different cultures.

Teachers suggested that concepts related to skin/race/culture differences should be at the forefront in concept selection. Many scholars state that multicultural education should aim to accept, understand, and teach different cultures, races, religions, genders, social classes, and geographies (Gay, 2000; Gorski, 2010; Salili & Hoosain, 2001). From this point of view, concepts specific to multiculturalism should be comprehensively included in the preschool curriculum. Teachers also stated that unknown concepts should be taught primarily in a multicultural classroom. An analysis of 76 studies on vocabulary teaching in early childhood education (Hadley & Mendez, 2021) revealed that unknown words are primarily selected in vocabulary teaching. In the multicultural education environment, language problems have been reported in previous studies (Abdullah, 2009; Adair, 2011; Yılmaz & Şekerci, 2016). Therefore, teaching unknown concepts first seems to be an important point in multicultural preschool education. On the other hand, participant teachers stated that children's readiness should be paid attention to in concept teaching and that there should be a concept teaching from known to unknown. Geofrey (2021) argues that children can make sense of new information based on their previous knowledge. Concept teaching should be planned in multicultural preschool classrooms by considering the mental dictionary (Güneş, 2013) where the words used by individuals in daily life are stored.

Three of the preschool teachers stated that adjustments should be made when dealing with specific days and weeks in the multicultural education environment, and one of them stated that there was no need to make changes. In a study examining the practices of teachers in multicultural early childhood education in Australia (Buchori & Dobinson, 2015), it was revealed that children from culturally diverse backgrounds were marginalized, cultural diversity was celebrated in a sloppy way despite the good intentions of teachers, and this situation was caused by teachers' lack of confidence and knowledge. At this point, it is important for preschool teachers to improve their knowledge about the activities of different cultures. Special days and holidays provide a great opportunity for teachers to expose children to cultural differences. Teachers should ensure that children understand the significance and meaning of each holiday (Derman Sparks, 2000; Neubert & Jones, 1998) and integrate them into the existing curriculum. This is because when children interact with the content of holidays, it is easier for them to remember the holiday and its meaning (Neubert & Jones, 1998). Therefore, celebrating special days and holidays of children from different cultural backgrounds can help children maximize their acceptance and respect for each other. Gay (2015) defines culturally responsive education as the behavioral expressions of knowledge, beliefs, and values that recognize the importance of racial and cultural diversity and are intrinsic to educational effectiveness in all areas of learning for students from diverse ethnic groups. This view reveals the necessity of providing a culturally responsive education in the classroom environment where various cultures coexist.

Field trips organized in early childhood have many important contributions to children's physical, intellectual and socio-emotional development (Handler & Epstein, 2010). Field trips, which allow children to make observations and raise awareness, support the acquisition of first-hand experience (Leback, 2007). In the qualitative findings of a study examining preschool teachers' attitudes and practices towards using picture books to teach cultural diversity (Zhang, 2022), it was reported that picture books alone are not enough to explain cultural diversity, and that they should be planned together with field trips that will enable children to gain first-hand experience. Learning through experience can help children learn about cultural diversity and help them lose prejudices by interacting with individuals from different cultures. Most of the teachers in this study suggested planning field trips in multicultural early childhood education by identifying places that children have not seen before. Ramsey (2004) suggested that teachers should organize field trips to compensate for children who have encountered limitations in the past. Ramsey also emphasizes the importance of parent meetings in organizing field trips. In these meetings, children's previous experiences and parents' memories of field trips with their children can be revealed and plans can be made for field trips that will benefit the child in cooperation with the teacher and the family. The participant teachers in this study stated that in organizing field trips, it is important to consider children's previous experiences and to pay attention to places that appeal to every child. In this direction, as Ramsey suggests, field trips can be planned by evaluating children's readiness and experiences through parent meetings.

The participants in the study stated that a preschool teacher in a multicultural education environment should have personality traits that are unprejudiced, impartial, inquisitive, loving and patient, and an attitude that does not marginalize, democratic, able to turn crisis into opportunity and patient. Van der Zee et al. (2012) defined multicultural personality traits in five items. Cultural empathy, which refers to empathizing with the feelings, thoughts and behaviors of culturally different individuals, open-mindedness, which describes an open and unprejudiced attitude towards cultural diversity, emotional stability, which reflects the ability to remain calm under new and stressful conditions, social initiative, which explains the ability to actively approach social situations and take initiative in such situations, and flexibility, which includes the ability to see new situations as positive challenges and the ability to adapt behaviors to fit cultural contexts. It is seen that the preschool teacher qualities revealed in this study overlap with the concept of multicultural personality stated by Van der Zee et al. (2012). The participants' personality traits of "without prejudice", "impartiality" and "non-otherizing" attitude traits are similar to the item "open-mindedness"; "patient" personality and attitude traits are similar to the item "emotional stability"; and "able to turn crisis into opportunity" attitude trait is similar to the item "flexibility". It is understood that personality and attitude traits have similar meanings in preschool teacher qualifications. In a study conducted with preschool teachers and pre-service teachers (Bulut & Sarıçam, 2016), it was found that as the multicultural personality level increased, multicultural education attitude scores also increased. In this direction, it can be stated that multicultural personality and attitude characteristics have a similar structure.

Most of the preschool teachers participating in the study recommended the use of drama method in multicultural education environment. Using the drama method in the classroom supports children's interpersonal relationships, self-empowerment, cooperation, and respect for other ideas and needs (Kuranchie

& Addo, 2015). Taştekin et al. (2016) state that drama activities in preschool education, especially related to different cultures, can offer children the opportunity to empathize and gain insight. Therefore, the use of drama methods in preschool education can help to achieve multicultural education goals. On the other hand, participant teachers stated that teaching methods should be diversified through question-answer, projection, video, and rhythm activities in multicultural education. Aslan (2017) found that teachers used methods such as drama, question-answer, games, and discussion in multicultural education practices. In another study (Kozikoğlu & Dilek Cavak, 2023), it was concluded that teachers used practices such as diversifying examples from different cultures, using different methods and techniques, enriching the course content, and functioning in different ways such as videos, pictures, games, and drama to diversify the process of multicultural education. Accordingly, the results of these studies are like the suggestions of preschool teachers obtained from this study.

Another finding of the study is teacher suggestions regarding classroom management in multicultural education. Teachers especially emphasized the issue of controlling classroom management. Since the cultural structure of each child is different, the behaviors, skills, and competencies of the child in the classroom may also vary. For this reason, while assessing children's skills and competencies, teachers should observe what children do during daily activities, what they are mostly busy with, and relate their actions to theoretical knowledge. The child's interaction with the people around him/her should be examined and competence should be assessed according to social and cultural functions (Sommer, 2005; as cited in Sheridan et al., 2009). Teachers' individual and culturally sensitive assessments of the child can be seen as a prerequisite for classroom mastery. One of the participant teachers stated that rules should be emphasized for classroom management to be effective in a multicultural education environment. The complex structure of the classroom environment necessitates the establishment and implementation of rules (Sarıtaş, 2003). In multicultural classrooms that contain diversity, rules need to be clearly defined, emphasized, and understood. Otherwise, classroom management may be negatively affected, and educational activities may not be carried out in a healthy way. Another teacher made statements that require classroom management according to culture. He stated that the culture and family structure characteristics of the students affect classroom management. Culturally responsive classroom management is an approach to managing children in the classroom in a culturally sensitive way that includes all children, not just racial/ethnic minorities. This approach considers students' backgrounds, social experiences, prior knowledge, and learning styles and aims to provide equal learning opportunities for all students (Metropolitan Center for Urban Education, 2008). In addition, teachers should be open and willing to demonstrate their cultural knowledge to students and their families (Weinstein et al., 2003). Implementing practices in this direction can reveal the effectiveness of culturally responsive classroom management.

In the other findings of the study, there are suggestions from preschool teachers regarding family involvement in multicultural education. Teachers stated that while planning family involvement, they organize family involvement specific to parents and that they carry out these arrangements by holding parent meetings and communicating with the family. Coleman (1991) points out that when planning family involvement in early childhood education, it is important to learn about family structures, family work schedules, parents' areas of expertise, family interests and needs, and to prevent situations that may create feelings of prejudice, fear, etc. about the school. For this reason, when planning family involvement, having preliminary information about the family can be useful in shaping and facilitating the multicultural education process. According to a study conducted in a multicultural preschool (Amini, 2011), it is seen that cultural differences create obstacles in language and communication problems in the parent-school context, different understandings of childhood, and perspectives on child-rearing. It is important for preschool education, which is the first step of formal education, to take these factors into consideration when planning family involvement and to take steps to resolve these barriers.

Teachers reported that while determining family involvement activities in multicultural education, activities aimed at transferring different cultures should be included. Achieving the goals of global education in early childhood requires integrating the concept into the existing curriculum and supporting it with family involvement. For children to learn more about the world around them requires preschools, teachers, and families to work together in various global and community activities (Bell et al., 2015). In this regard, it is important to invite families into the classroom to share their cultures through books, pictures, foods, and traditions-specific activities. One teacher in the study stated that family involvement activities should be selected according to the materials available in the family's home. Low socioeconomic status is seen as one of the factors that negatively affect family engagement (Hornby & Blackwell, 2018; Murray et al., 2015). Therefore, planning family involvement activities by considering the socioeconomic structure of each family can prevent the family's sense of inadequacy in terms of their stake in the child's education. One teacher stated that family involvement activities should be in a way that parents can understand. The language difference between school and parents often prevents parents from taking an active role in activities organized in the school environment (Hornby & Lafaele, 2011). Therefore, it is considered necessary to organize family involvement activities in line with communicative problems. On the other hand, another teacher stated that family involvement activities should appeal to all children. Culturally responsive teaching uses a pedagogy that incorporates a dynamic mix of race, ethnicity, gender, class, religion, region, and family that contributes to each student's cultural identity (Wlodkowski & Ginsberg, 1995). Family involvement activities in multicultural preschool classrooms should be planned to include the cultural identity of each child.

Three of the participant teachers in the study stated to take into account the cultural characteristics of the family while conducting home visits and to adopt a non-judgmental attitude that does not disturb the family. Cultural humility is defined as the ability to maintain an openness and interpersonal stance regarding aspects of one's cultural identity (Hook et al., 2013). Educators' openness to the realities of the larger context of society, the use of culturally competent strategies, and the ability to reflect on how ethnocentrism shapes perspective are important elements in the development of cultural humility (Weinstein et al., 2004). When organizing home visits in multicultural preschool education, teachers should have cultural humility that includes respect, empathy and openness to the lives, perspectives and worldviews of families and children with different cultural identities.

All teachers expressed the importance of home visits from various perspectives. Wright et al. (2007) explain the purpose of home visits as developing a positive relationship between home and school. It is important for teachers to make home visits to ensure that families and children with different cultural identities feel that they belong to the school. Through home visits, teachers can understand the lives of children and families and the academic, emotional, and social needs of children (Lin et al., 2008). Therefore, home visits help to understand all aspects of parents and preschool children with different cultural identities, to make inferences, and to develop them. Research shows that strong connections between home and school in early childhood are associated with high scores in language and cognitive development (Farver, et al., 2006; Lopez et al., 2006), literacy skills (Durand, 2011; Miedel & Reynolds, 1999), socio-emotional and behavioral domains (Lin, 2003; McWayne et al., 2004). In this direction, it can be understood that making home visits in the preschool period supports children's development in various skills and abilities.

When the findings related to the learning environment were examined, the participants suggested that learning centers and materials should be organized according to children's needs. Ramazan et al. (2018) state that learning centers in preschool education classrooms should be organized according to children's needs and interests. The presence of different cultural identities in multicultural preschool education classes considers the possibility that individual interests and needs may also diversify. The unique needs of each student may be related to their learning styles, developmental levels, socioeconomic status, learning experiences, religion, social class, and ethnicity. Therefore, with a culturally appropriate and sustainable pedagogical approach, teachers should consider student diversity and individual differences (Paris, 2012). In multicultural preschool classrooms, the learning center and materials should be organized by considering children's interests, needs and individual differences.

Another teacher who participated in the study suggested changing the learning center on special days, and three teachers suggested choosing materials specific to different cultures. Special days should not only include learning center arrangements that include the introduction of different cultures. Nieto and Bode (2008) emphasize that multicultural education is not an education that takes place in certain periods and states that it is an education that spreads throughout the process. This is because multicultural education manifests itself at all levels of the educational process such as curriculum, teacher-child interaction, parental involvement, and school management. Gayle Evans (2004) evaluated the level of multicultural education materials and activities in preschool classrooms in Florida. It was found that less than half of the teachers used multicultural materials and culturally sensitive activities in science, math, book, and music centers. The findings of the study show that preschool teachers are deficient in organizing multicultural learning environments. In this study, most of the preschool teachers suggested that materials that reflect different cultures should be selected.

When the findings related to assessment were analyzed, the participant preschool teachers stated that individual assessment is important in the evaluation of the child. In a study conducted by LaFreniere et al. (2010), social competence and behaviors in preschool children were evaluated by the teachers of a total of 4,640 children from 8 different countries. The results showed that there are some differences that can be attributed to culture and that the age factor in the incidence of behavioral problems is culture specific. Therefore, individual assessment should be prioritized, especially in a culturally diverse preschool environment. Culturally responsive assessment encompasses different cultural perspectives, ways of knowing and ways of participating in multicultural classrooms. It also focuses attention on assessing students' well-being and requires a thorough understanding of how this intersects with academic achievement (Kirova & Hennig, 2013). One of the teachers placed a special emphasis on the assessment of adjustment and language development in the assessment of the child. It has been mentioned in previous studies that the main problems experienced in multicultural education environment are united in the themes of language deficiency and difficulty in adaptation. In this direction, it is necessary to evaluate the main problems experienced in multicultural education primarily from the child's perspective.

In the second dimension of evaluation, the teacher's self-evaluation, the participants stated that preschool teachers should question whether they include all children in the education process. Teachers commented that self-evaluation should be done in the best interest of the child. Self-evaluation is a process in which educators' distance themselves from their thoughts and actions, understand how and why certain practices work or do not work, and adapt new understandings about them to be more effective in the future (McFarland et al., 2009). In this direction, preschool teachers' self-evaluation, and planning in their educational practices according to their conclusions can benefit the effectiveness of multicultural education. However, the results of a study (Reinking, 2015) showed that preschool teachers lacked knowledge about how and what to do in understanding and implementing multicultural curriculum. Therefore, it is necessary to provide teacher training on multicultural education first. Another question under the evaluation dimension of this research is how the program should be evaluated in multicultural education. However, the lack of responses from the participant teachers on this question may be related to the results of Reinking's (2015) study. It is understood that preschool teachers are not able to make program evaluation about multicultural education, which is rarely mentioned in the program. In a world where cultures are increasingly intertwined, both teacher training on multicultural education and revision of the preschool curriculum are seen as necessary. It is understood that preschool teachers could not make a program evaluation on multicultural education, which is rarely mentioned in the MoNE 2013 preschool program. Therefore, the fact that teachers do not have a view on multiculturalism in program evaluation may be related to the lack of multiculturalism in the MoNE 2013 preschool curriculum.

RECOMMENDATIONS

This study attempted to portray the views and suggestions of preschool teachers in terms of multicultural education within the framework of the basic elements of the preschool curriculum. Teachers stated that the achievements and indicators related to these areas are insufficient due to the problems experienced especially in the fields of language, social and emotional development. In addition, most of the teachers offer culturally sensitive curriculum suggestions for other categories created in the research based on their experiences.

This study had developed a suggestion that the current preschool education program could be helpful in reconsidering the preschool education program in the context of multiculturalism, as it contains the basic elements of the 2013 preschool education program. However, in February 2024, the current version of the preschool education program was published. In this program, issues related to multicultural education are included in sections such as learning centers, activity types, evaluation, outcomes, and developmentally appropriate practices (MoNE, 2024). The recommendations regarding the program in our current study were developed for the 2013 preschool education program of the Ministry of National Education. Future research can examine multiculturalism in the 2024 preschool education program from various perspectives and compare it with the previous 2013 preschool education program. In addition, for in-service preschool teachers MoNE can give seminars to increase their readiness to teach multicultural children around the country. For pre-service teachers, universities can open courses related to multiculturalism and multicultural education to prepare more qualified preschool teachers.

Finally, the participants of this study were limited to preschool teachers. Future studies can comprehensively examine multicultural education by considering families, children, teachers, school administration and society together in systems within the framework of ecological theory. Also, researchers can conduct research about multicultural education with different participants. New research can include children from different countries since each culture is unique and may require different teaching method to achieve. Also, multicultural children’s opinions can be recieevd in another research to figure out what they need and develop their education.

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