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Classroom Teachers' Perceptions of Difficult Children: A Phenomenological Study*

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Abstract: This study examined classroom teachers' perceptions of difficult children. It applied the descriptive phenomenology design of qualitative research approaches. In identifying the participants, the maximum variation sampling technique, one of the purposeful sampling methods, was used. Sixty classroom teachers working in Konya (20 from central schools, 20 from disadvantaged area schools, and 20 from private schools) have been selected and included in the study. Data were collected through semi-structured interviews and analyzed by the content analysis technique. Findings revealed that the participating classroom teachers were generally aware of difficult children's characteristics (such as having academic difficulties, exhibiting communication problems, inability to adapt socially, or disobeying classroom rules). According to the participants, there are at least five types of difficult children in schools: (1) children with giftedness or learning difficulties, (2) children who are overly active or silent, (3) children who are spoiled or not cared for by their families, (4) children who are excessively aggressive or quarrelsome, and (5) children who are distracted or uninterested. The study concludes that more research is needed to understand the difficult child phenomenon fully.

Keywords: Classroom teacher, difficult children, descriptive phenomenology

Introduction

Education is one of the most critical factors that shape the future of a country. One of the elements of this factor is teachers, and the other is students. Educational activities generally take place in schools. Students who are educated at school participate in the adaptation process by learning behaviors such as obeying social rules and fulfilling responsibilities. Thus, they become a part of the education process. However, the education process is slightly more difficult for some students. For instance, it is known that there are students at schools who experience delays or distortion in "the acquisition and use of speaking, reading, writing, comprehension or arithmetic skills" (Asfuroglu & Fidan, 2016, p. 49). Such children diagnosed with "dyslexia" (reading disorder), "disgraphy" (written expression disorder), or "dyscalculia" (mathematics learning disorder) as a result of genetic factors or functional disorders in the brain may experience a learning difficulty in at least one or more of these areas (Asfuroglu & Fidan, 2016).

Moreover, children in some disadvantageous groups including (1) refugee children who have to leave their homeland due to reasons such as war or natural disasters; (2) children who have mental, visual, auditory, or orthopedic handicaps resulting from birth or a disease/accident; (3) children who come from split families as a result of the death, divorce, or separation of parents; (4) child workers who have to start working at an early age to support their family or themselves; (5) children who have been exposed to physical, sexual, or emotional abuses may also experience severe difficulties during the education process (Bayir, 2019). For instance, Syrian primary-school-age refugee children who had to leave their homeland due to the war in Syria and presently reside in Turkey experience a severe language problem, and as a result of this problem, face academic and social adaptation difficulties in the educational process (Celik, 2019; Karaagac & Guvenc, 2019).

On some occasions, societies' educational policies are among the leading factors that negatively affect children's school lives. For instance, a regulation issued in Turkey on 21 July 2012 and published in the Official Gazzette numbered 28360 (https://www.resmigazete.gov.tr/eskiler/2012/07/20120721-9.htm) allowed children between 60-66 months of age to start primary school early. However, later research (Ozdemir & Battal, 2019) revealed that children in this age group had insufficient school readiness and experienced various adaptation and learning difficulties.

Due to these factors and similar situations, teachers experience numerous undesired behaviors during the educational process (such as disobeying rules, not completing the assigned tasks, or being disrespectful) (Esin & Dursun, 2014; Uysal, Altun, & Akgun, 2010). Such behaviors may also make the curriculum challenging to implement according to the stated goals and negatively affect teachers' motivation. The following four criteria are usually presented in the literature to coding a behavior as undesired behavior (Balay & Saglam, 2008):

- If the behavior prevents the student's or his/her peers' learning.
- If the behavior causes danger for the student's or his/her peers' safety.
- If the behavior damages the school equipment or the peers' possessions.
- If the behavior hinders the student's socialization with other students.

There are several reasons for undesired behaviors. While some of them stem from schools' or classrooms' physical conditions, some others may result from teachers' negative attitudes or parents' incorrect upbringing of children (Gokyer & Dogan, 2016). For instance, some parents may neglect to have the necessary authority over their children. As a result, we observe spoiled, carefree children who disobey rules. In some situations, the reverse is observed. Some parents put extreme pressure on their children and try to control them with strict rules at home. Mainly, parents' negative attitudes, such as lack of authority or being too rigid, display themselves as the child's problematic behaviors at school and in the classroom (Guven, 2019).

Apart from these types of domestic or environmental factors, some types of children who experience difficulties in obeying social rules due to different character traits and who refuse to receive help for their unique conditions negatively affect other children's education at school. Children who display such negative behaviors and attitudes as being oversensitive or anxious, worried or stressed in class, experiencing attention deficiency or hyperactivity, being overly quiet or too introverted, not obeying rules or being nonadaptive, being overly aggressive or violent are called "difficult children" (Greene, 2015).

This phenomenon, which was described as undesired behavior for years, is now defined as "challenging child", "socially disadvantaged child", "child under risk", and "difficult child" as a result of the increase in research in this field in the last decades. Discussions carried out currently in the literature concerning this topic (Armstrong, 2017; Burger, 2006; Erden, 2011; Greene, 2015; Greenspan & Salmon, 2013; Laney, 2005; Loehken, 2016; Ozdemir & Acarkan, 2014; Turecki & Tonner, 2011) have made it obligatory for us to perceive differently the children who have been labeled as problematic, naughty, lazy, arrogant for years and have experienced social, emotional, and behavioral difficulties. Also, it is observed that in traditional evaluations of negative student behaviors and attitudes, there is insufficient focus on the "temperament" phenomenon. On the contrary, studies conducted in recent years (Kansiz & Arkar, 2011; Tezer & Arkar, 2013; Totan, Aysan, & Bektas, 2010; Yagmurlu, Sanson, & Koymen, 2005) draw attention to the multifaceted effects of the child's temperament and personal characteristics on his/her behaviors, actions, or attitudes.

Although the terms "temperament" and "personality" are widely used interchangeably by some researchers, in reality, these two terms are quite different from each other. In general, temperament is a phenomenon related to the individual's biological roots and refers to his/her inborn natural manners and behaviors (Doksat, 2004). On the contrary, personality represents the distinctive characteristics of thoughts, emotions,

and actions that the individual has acquired later, defining how he/she has interacted with the social environment (Yilmaz, Gencer, Unal, & Aydemir, 2014). Personality, which develops on "the static/constant characteristics of temperament, has a dynamic/changeable structure" (Selcuk & Yilmaz, 2016, p. 8).

The "temperament" phenomenon was first studied by Thomas, Chess, and Birch (1970). This longitudinal study included 85 families and 141 children. In this study, the children were observed from birth for ten years, and the data were collected in specific intervals (at the ages of one, two, five, and ten). According to Thomas et al., all children exhibit differences in temperament characteristics from birth on, and the child's character is shaped by the interaction of this inborn temperament with environmental factors. A total of nine temperament traits were defined as a result of this study. Turecki and Tonner (2011, pp. 25-26) increased this number to ten by adding one more trait (self-control) to this list. The ten temperament traits are as follows:

- *Level of activity*: In general, how active is the child beginning from an early age?

- *Self-control*: Is the child able to control himself/herself? How much of the behavior is impulsive?

- *Distractibility*: How easily is the child distracted?

- *Intensity of reaction*: How loud is the child when happy or unhappy? How dominant is he/she? Does he/she exhibit exaggerated behaviors?

- *Rhythmicity*: How predictable are the child's behaviors concerning sleep, appetite, and evacuation habits?

- *Persistence*: When the child is busy with something, can he/she maintain interest (positive persistence)? When asked for something, how obstinate is the child (negative persistence)?

- *Threshold of responsiveness*: How does the child respond to a stimulus (noise, bright lights, colors, odors, pain, hot weather, taste, the texture of clothes, and the feelings they arouse)? Does the child get bored quickly? Is the child easily over-stimulated?

- *Approach or withdrawal*: What is the child's first reaction to newness (new places, people, food, and clothes)? Does the child approach it or withdraw from it?

- *Adaptability*: How does the child cope with transitions or innovations?

- *Quality of mood*: What are the primary character traits of the child? Is he/she cheerful or serious generally?

Accordingly, it is nearly impossible to carry out the educational process according to the desired goals without discovering children's inborn temperament traits. Although temperament is not the sole determiner of personality, it is a critical factor shaping one's character. It is essential to cause awareness in teachers concerning this factor and consider the effects of familial and environmental factors such as parent attitudes or school programs based on temperament. Although temperament is a concept that has been widely used by educators in recent years, we have to deal sensitively with temperament based on character types. It is believed that some temperament styles or types are more challenging and incomprehensible than others. The difficult child phenomenon is tried to be understood within the context of these temperament types

as individuals behave in styles in which their temperament affects their character without being aware of it. This situation differs for difficult children in terms of their experienced difficulties and the difficulties they cause to other people.

For instance, Greenspan and Salmon (2013) have argued that there are five types of difficult children depending on their general characteristics and the shared elements of their reactions: "oversensitive child", "introverted child", "rebellious child", "careless/distracted child" and "active/aggressive child". Accordingly, "introverted children" (who have such characteristics as being shy, quiet, and unresponsive) and "rebellious children" (who have the reverse features such as being stubborn, challenging, controlling, and obstinate) experience different types of difficulties in their family, society, school, or classroom. At the same time, they cause other people to experience these difficulties. The most prominent problem faced by teachers when communicating with these children, and the biggest hindrance in guiding/helping them, is that they cannot understand and define the exact situation in which the children are.

One of the most significant reasons underlying this situation is that teachers do not spend enough time with their students to know them well. For instance, a study conducted with 457 Italian sixth-grade students and 58 teachers (Marucci, Oldenburg, & Barrera, 2018) examined how well teachers knew their students (how attuned they were with their students). The study investigated the extent to which teachers were aware of which students were highly liked, disliked, antisocial, aggressive, or engaged in risky behaviors. According to the study findings, it was observed that the "teacher attunement" phenomenon was positively associated with (a) how much time teachers spend with their students and (b) their awareness of children's peer relations and experiences. In other words, the more time teachers spend with their students during the educational process, the better they know their students and the social dynamics among them.

This study aimed to examine classroom teachers' perceptions about difficult children. The study intended to determine the extent to which classroom teachers were aware of difficult students in their classes and their characteristics. For this purpose, answers to the following questions were sought:

- How do classroom teachers define and conceptualize difficult children?

- What are the characteristics of students perceived as difficult children according to the opinions of classroom teachers?

- Which metaphors do classroom teachers use to reflect their perceptions of difficult children?

- From the classroom teachers' perspectives, what kind of character styles do difficult children exhibit in their social communications and interactions?

Method

Study Design

This study was conducted within the phenomenological research design, one of the qualitative research approaches. Phenomenological studies focus on phenomena that we are aware of but do not have a deep and detailed understanding. According to Yildirim and Simsek (2013, p. 78):

> "Phenomena can appear in various types such as events, experiences, perceptions, orientations, concepts, and situations in the world in which we live. We may encounter such phenomena in different ways in our daily lives. However, this familiarity does not mean that we understand them to the fullest extent. Studies which aim to explore the phenomena that we are familiar with but do not understand well constitute appropriate bases for phenomenology."

Phenomenological research focuses on people's experience and the in-depth meaning people derive from these experiences (Patton, 2014). According to Ersoy (2019), "descriptive phenomenology" and "interpretive phenomenology" are the two main approaches. While the primary purpose of descriptive phenomenology is to describe the participants' perceptions and experiences about a phenomenon, interpretive phenomenology tries to delve into how they make sense of a given phenomenon based on their experiences. This study, which was conducted using the descriptive phenomenology design, has the concept of "difficult child" as its phenomenon.

Participants

Table 1 shows the participating classroom teachers' demographic characteristics.

Table 1.

Demographic Characteristics of the Participants

Central School (CS)			Disadvantaged Area School (DAS)			Private School (PS)		
Participant code	Gender	Teaching experience	Participant code	Gender	Teaching experience	Participant code	Gender	Teaching experience
CS1	F	18	DAS1	M	15	PS1	F	2
CS2	M	41	DAS2	M	9	PS2	F	11
CS3	M	30	DAS3	M	14	PS3	F	39
CS4	M	39	DAS4	F	16	PS4	F	3
CS5	F	14	DAS5	M	22	PS5	F	11
CS6	F	31	DAS6	F	15	PS6	F	2
CS7	M	31	DAS7	F	13	PS7	F	2
CS8	F	20	DAS8	F	12	PS8	M	20
CS9	M	10	DAS9	M	15	PS9	M	43
CS10	M	30	DAS10	M	12	PS10	F	5
CS11	F	20	DAS11	F	11	PS11	M	35
CS12	M	21	DAS12	F	14	PS12	F	4
CS13	M	25	DAS13	M	26	PS13	M	13
CS14	M	27	DAS14	F	17	PS14	M	5
CS15	F	25	DAS15	F	17	PS15	M	5
CS16	F	8	DAS16	M	17	PS16	F	29
CS17	F	25	DAS17	F	22	PS17	M	37
CS18	M	1	DAS18	F	20	PS18	F	7
CS19	M	6	DAS19	F	16	PS19	M	22
CS20	M	21	DAS20	M	23	PS20	M	28

To determine the study participants, maximum variation sampling, a purposeful sampling technique, was used. The aim of this technique is "to create a comparatively small sample and to reflect in this sample the variety of individuals who will be present in the focused problem on the maximum" (Yildirim & Simsek, 2013, p. 136). From this point of view, 60 teachers employed in three different types of schools in Konya (20 from central schools, 20 from disadvantaged area schools, and 20 from private schools) have been selected and included in the study. The purpose was to present similar and different perceptions of teachers working in different types of school settings and demographic factors such as gender and professional experience. As shown in Table 1, the participants included 28 females and 32 males, and their teaching experiences ranged between two and 41 years.

Data Collection

The study data were collected using semi-structured interviews. According to Patton (2014, p. 341):

> "We conduct interviews with people to find out what we cannot observe directly. We cannot observe situations in which an observer is not present. We cannot observe how people organize their lives and which meanings they associate with their life experiences. We must ask questions to people in order to learn such things."

This point of view has given the motivation to use the interview technique and present the study data in detail. Four open-ended questions regarding the study's four sub-questions were asked in the semi-structured interviews conducted with the participants. Also, probing questions were directed to the participants to elaborate or exemplify their views they shared based on these questions. The four open-ended questions used in the interviews are as follows:

- Who is a difficult child? How would you define him/her?
- In your opinion, what behaviors and characteristics of difficult students make people perceive them as difficult children?
- What/Whom would you resemble a difficult child? Why?
- In your opinion, what kind of character traits do difficult children exhibit in their social communication and interaction processes?

A voice recorder was used to record the interviews. The schools in which the interviews were conducted were determined beforehand. The approval (permission) for the study was received from the Konya Provincial Directorate of National Education. As the study was based on a voluntary basis, interviews were conducted at each school only with the classroom teachers who were volunteers instead of interviewing all teachers. The interviews were conducted face-to-face in appropriate settings at the schools during pre-scheduled hours. Before the interviews, the participants were reassured that the recordings and their names would be kept secret so that they could express their feelings and thoughts freely. Also, the study's purpose was explained to them shortly

before each interview, and they were assured that the views that would be shared would be invaluable for the study's findings.

The interviews were carried out during teachers' free hours, lunch breaks, or in between class hours. Special care was taken to conduct the interviews at suitable times for the teachers to prevent conflict concerning class hours and not cause any inconvenience. A small portion of teachers requested to conduct the interviews between classes or during lunch hours. Special care was taken to use time efficiently to get maximum efficiency from such interviews. On the contrary, most of the interviews were conducted in teachers' free hours without facing any time limitations. Also, some interviews which initially had some tense or worried participants turned out to be sincere conversations in which they expressed themselves comfortably and thanked the interviewer. At the end of the interviews, most classroom teachers expressed that they were pleased about the interviewer listening to them and valuing their thoughts.

Data Analysis

Qualitative data analysis involves the processes of converting data into findings and interpreting them (Patton, 2014). In this study, the data were analyzed using the content analysis technique. For this reason, the rough data obtained from the interviews were transcribed first. Following that, the data were organized within the study's sub-questions, and themes were identified. In addition, sub-themes were formed by coding similar opinions under each theme. The participants' own words and descriptions were used to name the themes. Finally, the data were converted into visual aids using figures. Direct quotations were used to increase the trustworthiness of research findings. Demographic information showing which opinion belongs to which participant was presented as codes in parentheses right after a given opinion (e.g., CS1, F, 18). The abbreviations "CS1", "DAS1", and "PS1" represent the types of schools where the classroom teachers work and their alphabetical order according to their first names. The letters "M" and "F" stand for male and female. The number presented right after gender represents the teachers' experience in years.

Findings

In this section, the participants' answers to the open-ended questions in the semi-structured interviews were analyzed and presented in four themes within the research's four sub-questions. The four teams are (1) perceptions of difficult children, (2) types of difficult children, (3) metaphorical images of difficult children, and (4) difficult children in the social process.

Perceptions of Difficult Children

Figure 1 shows the definitions of participants on difficult children. The first five sub-themes in Figure 1 present the participants' conceptualizations of difficult children, whereas the sixth sub-theme represents the explanations of teachers who refused to accept the difficult child phenomenon. Below, these sub-themes are explained one by one.
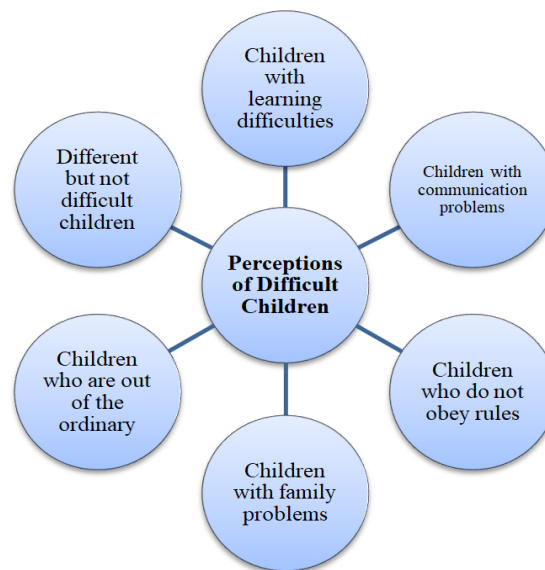
Figure 1. Perceptions of difficult children

Children with learning difficulties

Under normal circumstances, every teacher desires to have students in his/her classroom with similar learning abilities. However, this is difficult to ultimately accomplish even in special classrooms arranged based on placement tests because every student may be a bit behind in some subjects. In contrast, some others may have success rates much higher than the average. Similarly, classroom teachers who participated in this study regarded students below or above the class average as having learning difficulties. They expressed that the children in both groups were equally challenging. The first group was conceptualized as children who learned later than the others, and the second group as children believed to be gifted or talented. According to this point of view, gifted children experience difficulties in class as much as children with learning disabilities and strain their teachers. These children, who get bored and focus their attention on other things in classrooms where their expectations are not met, may display undesired behaviors and may receive teachers' adverse reactions. For instance:

- "A child who has learning difficulty is difficult. If he/she is a bit below average, that child is difficult because he/she expects extra attention. If a child learns faster than the others or has an IQ higher than the other class members, that child is also difficult because he/she expects more

knowledge and attention from you. Both children experience difficulties in the classroom as education is carried out according to mainstream students." (CS5, F, 14)

- "A difficult child is the type of child who has different characteristics compared to other students in general and needs different teaching methods and techniques." (DAS1, M, 15

- "Difficult children are those who learn and perceive slower than others, needing different methods on a topic to learn, as well as those who are too smart to keep up with the pace of learning in the classroom." (PS7, F, 2)

Children with communication problems

A curriculum that has to fit into specific class hours, overcrowded classrooms, and short breaks confine the amount of time spent to have high-quality communication with students. However, communication is one of the critical points of the teacher-student relationship in the classroom. Despite this, the method of communication is different for each child. Individuals' communication preferences generally bear the characteristics learned from family and the environment. In addition to this, the person's temperament is an essential factor that shapes the person's communication style. This communication style affects all of the child's family relationships first and later in the immediate environment or school. However, the participating classroom teachers' definitions regarding some difficult children's communication styles have been associated with a lack of communication. These types of children, which are identified as experiencing problems having conversations, are difficult to convince and understand and are replaced in the category of difficult children by their teachers. For instance:

- "They are students that we cannot convince, collaborate with, or communicate with, who isolate themselves from us." (CS19, M, 6)

- "A difficult child is one that is difficult to reach and requires effort to do so. You cannot understand a difficult child easily. It is easy to get to know some children, but getting to know such children is quite difficult. Even when you spend many years with a difficult child, things may not go as well as you wish." (DAS18, F, 20)

- "Difficult children are those who have difficulty communicating and with whom we have communication difficulties." (PS3, F, 39)

Children who do not obey rules

Rules are an essential factor in maintaining the teaching-learning process in the classroom. Once rules are determined, they are announced to class members, who are expected to obey them. However, one cannot always get what is desired, and there may be students who object to rules. In this respect, students who disobey or oppose rules have been included in the study participants' definitions of difficult children. Classroom teachers whose opinions are presented below have described these types of children as inharmonious, annoying, and on some occasions, arrogant. Although these types of students who disturb others have different reasons for disobeying rules, some teachers state that these students' behaviors are on purpose, implying that they are furious about this situation. For instance:

- "They are children who are disobeying class rules and general school rules and cannot get along with their peers. They harm the congruence and harmony of the class." (CS4, M, 39)

- "Difficult children are those who cannot accept. They do not accept rules and advice. They do as they wish and have been brought up without discipline." (CS17, F, 25)

- "They are children who have problems obeying rules and sometimes do this without being aware of it and sometimes on purpose to conflict with others. They act so as they have received too much or too little attention from their families." (DAS14, F, 17)

- "They are children who disobey class rules and think they know everything. They consider themselves superior to others, but we do know that they do not know too much." (PS20, M, 28)

Children with family problems

The family was one of the most prominent factors that some participants referred to when handling behaviors of difficult children. These teachers have attracted attention to the problematic family structure rather than the difficult child phenomenon. The fact that the environment was an important determining factor was emphasized as the second element to express the difficult child. It was stated that family and environment could negatively or positively affect the child and cause him/her to be perceived as difficult. For instance:

- "When I think of these students, I believe that these types of children exhibit such behavior due to domestic and social factors. The difficulties of these children stem from family and environment. I believe that children display different behavior due to domestic and environmental fears, especially pressure and physical violence at early ages, and factors related to these." (CS3, M, 30)

- "I believe they are children who face challenges because of environmental factors. As the environments we work in are all disadvantaged area schools, with the children we see as difficult children, the problems are usually related to parents. Parents do not show enough interest in their children. They just send the children to school without a purpose. They just want their children to complete their compulsory education and learn to read and write. They do not want to send their children to school after compulsory education. Thus, they do not allocate attention to their children." (DAS11, F, 11)

- "A difficult child is one who experiences behavioral problems related to family and causes difficulties to others because of these." (PS12, F, 4)

Children who are out of the ordinary

Some participants have perceived difficult children as not ordinary or fitting into standards. Not fitting into standards means being closer to the unknown and departing from the normal. In this respect, a child who has not been met or known priorly may gradually cause problems in the educational process. When the opinions in this category are analyzed in detail, it is observed that classroom teachers try to explain difficult children using temperament. Although the number of such teachers is low, it draws attention as these teachers focus on genetic, character, nature, and temperament while defining difficult children and having the awareness to understand difficult children considering these factors. These teachers have also expressed that they do not consider themselves to be challenged by these students. Instead, it is the

individual defined as a difficult child who faces a challenge. They have stated that it is their primary duty to guide/help these students in the teaching-learning process due to these reasons. For instance:

- "I believe that a difficult child is one that I cannot provide any solutions for even though I use all scientific, humane, and moral methods that I know of as a teacher. I believe that the reason is genetic. There is no other reason for this." (CS4, M, 39)

- "Difficult children are those who are not mainstream, or different from general standards. They usually have a character that refuses to adapt to school life." (CS20, M, 21)

- "I define difficult children by dividing them into two categories: Some children display undesired behaviors due to family and environmental factors. On the other hand, some children may display negative behaviors with their inborn characteristics without external factors. No matter how well you treat them, do your best, or provide all desired conditions for them, they present behaviors that make you question whether you have made a mistake somewhere. I believe difficult children are those types of children." (DAS15, F, 17)

- "A difficult child is one that presents a different challenge for teachers. A difficult child is one who has differences due to some inborn characteristics. Temperament is dominant in difficult children." (PS8, M, 20)

Different but not difficult children

This sub-theme reflects an approach that considers the child solely as a child. According to this approach, each child is unique, exhibits individual differences, and has some rights as a child. Sometimes they have challenging sides, but this should not place him/her in the difficult child category, and the difficult situations he/she causes should be treated with understanding. It is observed that this approach is used from the child's perspective and not evaluated in terms of the difficulties the teachers encounter. When the definitions of difficult children in this category are carefully examined; children who are spoiled by the family and the environment, children who do not obey the rules, children who learn slowly in the classroom or who have a higher IQ and make teachers feel inadequate, always active/hyperactive children, and children who are difficult to communicate are also defined as difficult children. This multifaceted approach reflects classroom teachers' positive attitudes who try to understand students without prejudices with their differences. For instance:

- "Actually, there is nothing called a difficult child because I believe that some teachers and parents use such terms. Maybe some children are a bit more active than others. Some children learn slower than others or with different methods. It is said that difficult children are very active, disturbing, or do not listen to adults. However, that is why that child is different. If everyone is obeying the rules, nothing happens there, and the children are not at ease. When considered in general, each individual is different. They have individual characteristics specific to themselves. For this reason, they will act differently, of course." (CS7, M, 31)

- "I believe that there is no such thing as a difficult child. I care about individual differences. I do not like monotype students. I like different characters. Of course, there are challenging children. There are some children, some traits of whom are at extremes compared to their peers. Nevertheless, would these put us off from our job? No. I believe that we can overcome all difficulties with love." (CS1, F, 2)

- "I believe that teachers have created the difficult child concept. There is no such thing as a difficult child. The education systems, schools that offer educational services; teachers who work in these schools; techniques and methods used by teachers; tools and equipment; and the assessment and evaluation approaches they employ all result in easy or difficult children. If you do not make changes in the educational setting, if you do not use techniques and methods suitable for the age and needs of the child, the child will be difficult in the classroom." (CS19, M, 22)

Types of Difficult Children

Figure 2 shows the types of difficult children stated in the participants' opinions. Below, these types of difficult children are explained one by one.
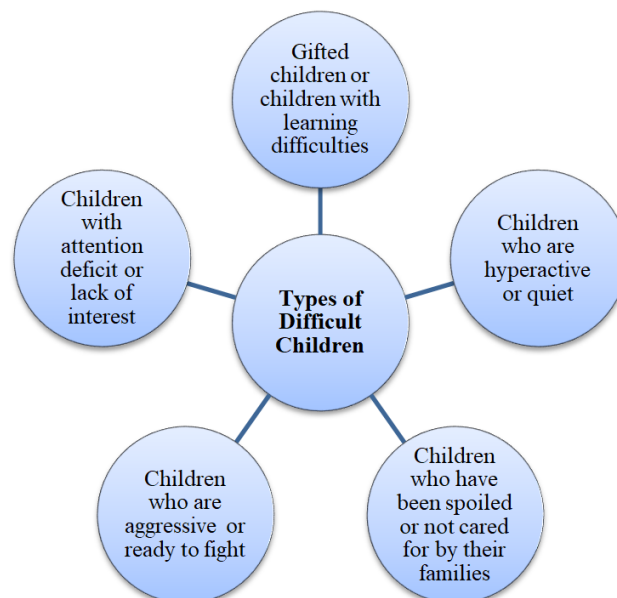
Figure 2. Types of difficult children

Gifted children or children with learning difficulties

Children in this category are evaluated in two sub-categories regarding their characteristics. The first sub-category is children behind their peers in class or believed to have a problem like learning difficulty, whereas the other sub-category includes children who are believed to have IQs above average. Although these children show similarities in their behavioral styles, they are generally seen as children who draw attention to traits such as maladjustment, hyperactivity, stubbornness, or lack of interest. For instance:

- "Their perceptions are usually closed. They have perception problems. They have difficulty answering questions." (CS1, F, 18)

- "They are children who draw attention with their intelligence. Either they are loud or too quiet. Teachers easily notice the loud ones while they do not even notice the quiet ones." (CS6, F, 31)

- "These children generally make it difficult for the teacher to teach the subject. The difficult child may or may not have an idea of what the subject is. Both situations cause problems for teachers. When the student does not know the subject, this prevents his/her interest in the class. If child knows the subject, then he/she gets bored." (DAS1, M, 15)

- "These children have a problem of learning slower than others. Apart from these, some children are intelligent but cause problems with their behaviors. Some children cause complaints during each break time. They have either injured someone or been in a fight with someone. I also consider those types of children as difficult. "(DAS12, F, 14)

Children who are hyperactive or quiet

Participants defined children who are hyperactive or quiet in contrast as difficult children. When the opinions in this category are analyzed, it is understood that hyperactive children or children who are quiet and do not respond to external interventions are perceived as difficult children. For instance:

- "They are hyperactive, but when we ask them what and why they are doing, they respond with the answer 'nothing'." (CS2, M, 41)

- "There are children who are quiet and introverted, and whose voice you can hear only when you directly ask a question to them. Those children are more difficult to handle. They are children that we should not overlook because we may lose them completely. Children who are active prove their existence by being naughty. However, introverted children are insignificant. We experience more cases of losing those children in crowded classroom settings such as in central schools." (CS5, F, 14)

- "To give a simple example, these types of children never sit back and listen to the teacher. They have to get others' attention. They disturb their classmates or want to go to the bathroom constantly. They never sit quietly. They are more active than the average child." (CS8, F, 20)

Children who have been spoiled or not cared for by their families

Another kind of difficult child emphasized in the participating classroom teachers' statements is spoiled children. It has been observed that these types of children also frequently display problematic behaviors. Families have been pointed out as the cause of problematic behavior. It has been emphasized that inadequate or incorrect training in the family, the family's lack of love or extreme interest in the child causes problems in him/her such as being spoiled, disobeying rules, being irresponsible or problematic in social relationships. For instance:

- "I believe it is something caused by the family. The difficult child has a family source. For example, there may be educational problems in the family. Children with divorced parents, those whose fathers are in prison, or those who do not live with their parents may be given examples. These children have a longing for love, and they have problems. I believe that they are not naughty; they have not received enough love and attention. These children show their reaction either by keeping their feelings to themselves or overreacting." (DAS6, F, 15)

- "They are children who have problems obeying certain rules in social structure and sometimes do this with an awareness of their actions and sometimes unconsciously. They behave so due to the extreme or insufficient attention of their families. They are children who cannot obey rules or have good communication with their peers or perceive the world from a different angle compared to

their peers. They are defined as difficult children as their vision of the world, and incidents are different. They are exposed to different reactions by their peers." (DAS14, F, 17)

- "A difficult child is one who has been spoiled by his/her family, and does not listen to anyone, or tries to do everything he/she wants." (PS13, M, 13)

Children who are aggressive or ready to fight

Children who have a temper, tend towards violence or aggression have also been considered difficult children by teachers. These children's most prominent characteristics have been emphasized as being inharmonious, stubborn, and quarrelsome. For instance:

- "The child is incompatible and acts disturbingly. There is a tendency to violence. The child walks around instead of listening to the teachers. He/she expects everyone to show interest in him/her as he/she does not get enough attention at home. The child is either restless in class or shows his/her feelings by fighting in class." (CS3, M, 30)

- "They act like mavericks, form groups, act as leaders and get into fights. They are ill-tempered, and there is a tendency to violence. They have hyperactivity that they cannot prevent." (CS12, M, 21)

- "These types of children generally tend towards violence. When I talk to them about a problem, they say: 'I receive worse reactions at home. I am beaten. What you say does not affect me, no matter how much you talk.' What we try to do is in vain due to the violence they are used to, and I call them children with whom we cannot reach the desired results." (DAS9, M, 15)

Children with attention deficit or lack of interest

One of the salient characteristics of difficult children is distractibility and the lack of interest in the subject that accompanies it. It is observed that classroom teachers stated different reasons for this in their examples. For instance:

- "These children do not like to act the standard way. They act as opposed to social norms. They get bored when they carry out the same tasks in class. They are incompatible and get bored easily, which is challenging. They are easily distracted. They are straightforward and do not mind expressing straight that they are bored. They cannot sit still for a long time. Their way of thinking prevents them from being in the same position for a long time. They want to stand up. They do things to show that they are bored. In short, they are not interested in the lesson and distract the other students' attention with their actions." (CS10, M, 30)

- "These children experience too much distraction. They have difficulty concentrating in class. They are disorganized and act inconsistently. I believe that these children do not have good examples in their family or environment. This area is an agricultural region. They want to do their fathers' jobs and do not have a positive attitude towards education. I think they do not have goals." (DAS10, M, 12)

Metaphorical Images of Difficult Children

The participating classroom teachers were asked to resemble difficult children to a living creature or an object to present a more distinct explanation of difficult children in their minds. They were also asked to state why they chose to make that resemblance.

Some participants said that these children were unique and refused to resemble them to another entity or object. When the metaphors presented by the teachers were analyzed, it was observed that they emphasized the characteristics of difficult children within the framework of five sub-themes identified in Figure 3. Below, these sub-themes are explained one by one.

Children who are difficult to handle

According to the participants, difficult children cause problems in the classroom because they have some characteristics, which are difficult to handle. When considered from this aspect, it is observed that teachers do not fully understand difficult children or find reasons for their behaviors. Thus, they experience problems when trying to communicate with difficult children. For instance:

- "I resemble them to mercury because it is difficult to bring together once scattered. Difficult children are like that too." (CS9, M, 10)

- "They are like a car with a broken engine. Traveling with them seems long and difficult." (CS15, F, 25)

- "I resemble them to a wall because they are unresponsive and quiet. It is difficult to get through to them." (DAS7, F, 13)

- "I would say a piece of rock because it is difficult to shape such children." (DAS12, F, 14)

- "They are like play-dough which has hardened because they do not take the desired shape." (PS2, F, 11)

- "They are like a flat tire because it is tough to travel with them." (PS12, F, 4)

- "It is like spinning on a stabilized road. Travelling with these children is difficult." (PS17, M, 37)
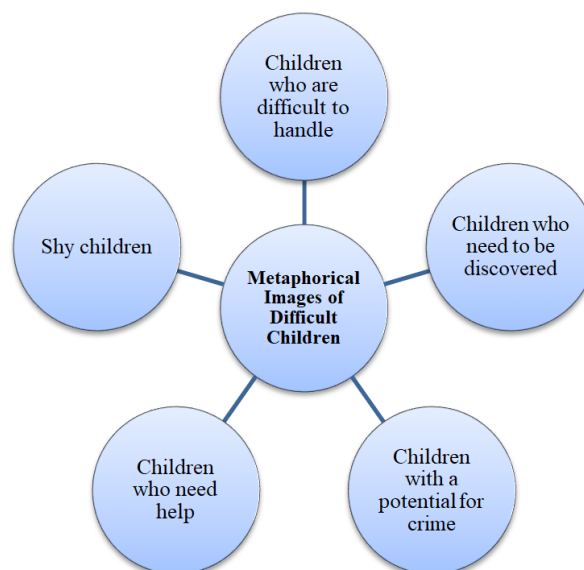
Figure 3. Metaphorical images of difficult children

Children who need to be discovered

Difficult children always have a mysterious side in the minds of teachers. The behaviors and reactions of difficult children initially perceived as unfavorable get some classroom teachers' attention and arouse interest and a need to discover. Teachers who pursue this curiosity stated that they achieved good results when they got to know these children. For instance:

- "I regard them as an electronic tool that we are not familiar with but wish to learn and use. In order to use the tool, I first have to discover. Difficult children may also succeed, but we have to discover them first." (CS6, F, 31)

- "They are like mines which have not been discovered because we do not completely know what they feel or experience. I think they have secrets and as science improves, their secrets will be revealed." (CS12, M, 21)

- "They are like a nut which is difficult to crack but sometimes there is something nice hidden inside." (CS16, F, 8)

- "They are like an encrypted suitcase because when you decrypt, you will get rid of the difficulty." (DAS16, M, 17)

- "They are like a planet that needs to be discovered. He/she is incomparable and unique." (PS8, M, 20)

Children with a potential for crime

It is possible to encounter children in each class who are more aggressive, quarrelsome, and sometimes throw a tantrum. These types of behaviors are sometimes learned from others. Parents', relatives', and other people's attitudes may set a bad example for children. In some other cases, despite several positive examples in the child's environment, the child is aggressive because of his/her temperament. Whatever the reason, if the tendency for violence is not dealt with at early age, it may result in situations in which the child harms not only himself/herself but also society. Teachers who developed metaphorical images in this category emphasized that it was imperative to notice aggressive, difficult children. For instance:

- "They are like predators because they constantly harm others." (CS4, M, 39)

- "I resemble them to rubber balls. When you leave them, they go on bouncing forever." (CS18, M, 1)

- "Wind maybe because you cannot keep them under control. It can be more difficult if the wind is strong. Then you cannot even keep yourself in place; you cannot control it. This is how the teacher feels like in the classroom." (DAS4, F, 16)

- "A wound clock maybe. Needs outer control all the time." (DAS11, F, 11)

- "They are like luna moths. They go towards something all the time but do not understand the harms of that thing." (DAS17, F, 22)

- "They are like an octopus because their arms reach all places and they exhibit disturbing behavior." (PS7, F, 2)

Children who need help

According to the participants, some students who present characteristics of difficult children may lead an everyday life with positive feedback if they are guided correctly. Continually focusing on students' negative aspects creates a feeling of tedium in both the child and the teacher. However, suppose the teacher observes the student well and identifies his/her positive characteristics. In that case, the student may discover his/her positive characteristics, but children need help, support, and guidance from adults concerning this issue. For instance:

- "I resemble these children to tomatoes that I get from the market. I mean, you get a box of tomatoes from the market and bring them home. You see that some of them are about to rot, whereas some others are ripe or unripe. You cut the ones which are about to go bad and make tomato sauce. You use the ripe ones for salad, and you keep the unripe ones in the corner. You leave them to time. People are not the same." (CS2, M, 41)

- "They are like raw materials. They need the guidance of teachers and parents." (CS20, M, 21)

- "They resemble a tree with fruit that cannot be seen. You need a long busy process to see the fruit. We must give it time and take good care of it." (PS20, M, 28)

Shy children

Some difficult children display introverted characters. These children get the teacher's attention with their quiet, shy, and timid reactions and fail in social relationships. Despite this, these types of children have a high sense of responsibility. If teachers approach these children appropriately and patiently, they may receive positive feedback in the future. For instance:

- "We may resemble them to a canary. A timid bird which gets closer to you as trust develops. But it may fly away if you do not know how to keep it in your hands." (CS3, M, 30)

- "They are fragile like tulips. They wait for a year to blossom." (CS5, F, 14)

- "Difficult children are like closed rooms. No sunshine inside and you do not know what is in it. You can live in that room only when you open the curtains and take care of it." (CS10, M, 30)

- "Maybe a seedling which grows slowly and does not give any reactions for a long time but suddenly grows into a tall tree because a difficult child also does not respond until he/she feels secure." (PS6, F, 2)

Difficult Children in the Social Process

Each child has social interactions with his/her teachers in the classroom or school initially and following that with each adult that he/she communicates. If the child's social communication and interaction are sufficient and robust, his/her way of expressing himself/herself and self-confidence will be healthy. The contribution of a healthy social interaction to the child's future is a grown-up with balanced relationships, a good family member, and a citizen. Figure 4 presents the three types of personality structures that difficult children exhibit in social communication and

interaction based on participants' opinions. These personality structures are explained below one by one.
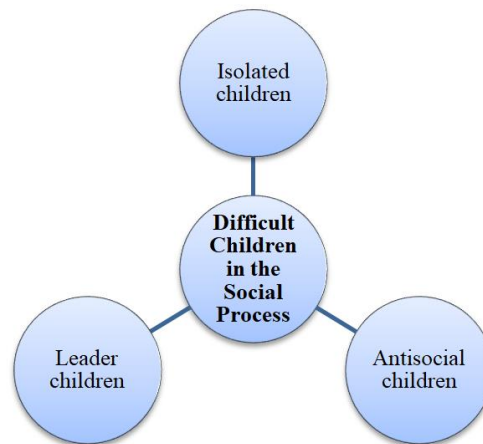
Figure 4. Difficult children in the social process

Isolated children

In the social communication and interaction dimension, we observe the type of children who are regarded as hyperactive by the participants and can easily join playgroups and start friendly relationships but cannot maintain a healthy friendship. Characteristics such as their extreme reactions, instability in obeying rules, and violent tendency cause them to receive adverse reactions from peers and become isolated. In the meantime, children who are known by teachers and peers as such are labeled negatively. For this reason, their chances of having social relationships are limited. The families are also informed about this negative labeling, and the result is social isolation. For instance:

- "There is a lack of communication; they cannot make friends. They are isolated in the playgroups because of their aggressive behavior. Students are intolerant of those who disturb them and disobey rules." (CS4, M, 39)

- "Children who hit and smash things are not easily accepted in social environments. Maybe the child is willing to include his/her friends in the group, but families may say things such as 'Do not sit with that child because he/she harms you'. Alternatively, they come to school and complain to the teacher, saying that they do not want that child to sit with their children. Some families even talk to the difficult child themselves. They tell the difficult child not to sit with their children. Then, the child sets up barriers and becomes more aggressive and tempered." (CS5, F, 14)

- "They get warnings in the classroom and have a bad reputation because of this. Their extreme behavior causes them to be isolated. Other students dislike those who tend towards violence. They have a difficulty of having healthy relationships." (CS18, M, 1)

- "Their behaviors negatively affect their relationships with their friends and other people. They experience a negative cycle in communication. In general, people do not understand them. Very few people can understand their situation. They are misunderstood, and people look down on them. They receive negative reactions and feel sad about this. People may make fun of them." (DAS15, F, 17)

Antisocial children

It is observed that introverted children are another group of children that experience problems in social interaction. As these types of children cannot express themselves well, they are perceived as lonely, unhappy children with weak social communication. They are seen as boring by their classmates and cannot join in games. The most prominent trait of these types of children is their lack of social skills. Thus, although they are willing to participate in games and join social groups, they have difficulty accomplishing this. They need guides who can understand and help them. For instance:

- "They do not participate in games. They are unenthusiastic in all topics. They do not make suggestions. They have difficulty forming relationships. They are known as antisocial." (CS1, F, 18)

- "Children who are quiet and introvert are also cold towards their friends and keep themselves at a distance." (CS3, M, 30)

- "Their social weaknesses cause disadvantages for them. They are not interested in others. Likewise, others are not interested in them." (CS10, M, 30)

- "These children cannot express themselves and are left alone. Children who seem not to exist in the classroom are known as difficult children." (DAS6, F, 15)

- "There are children who refuse to communicate. Whatever you do, they do not feel happy or sad. They do not give a reaction. I mean, they cannot express their feelings. You cannot have healthy communication with these children." (PS6, F, 2)

Leader children

Another issue that draws attention to the participants' opinions is that some difficult children have leadership qualities. Children who are considered hyperactive are a step further than their peers about starting games and being successful in games. However, these types of children can change their hyper-activeness to a disadvantage. It is believed that if these types of children are supported professionally by their teachers and environment, they can change this situation to a positive one in the future. For instance:

- "Advantages and disadvantages vary depending on the traits of the child. Some are naughty. They are active and good at sports. When it comes to classes, these children may experience attention deficiency and lack of interest and become unsuccessful. However, I observe leadership characteristics in these children on the whole. They are naughty, but they have the elements of fun and leadership." (DAS10, F, 5)

- "They are brave; they can easily do things that other children cannot. For example, some children earn their own pocket money by selling things or polishing shoes. This is an advantage for them." (DAS13, M, 26)

- "They are hyperactive and enjoy being leaders. They do not have difficulty expressing themselves. They are strong enough to express themselves in public, and they have self-confidence because they are not timid; they are energetic. For this reason, they may be leaders." (PS4, F, 3)

Discussions

The "difficult child" phenomenon, which is the subject of this study, is generally explained in the literature based on "temperament" (Thomas et al., 1970). According to this approach, from birth on, every individual brings along his/her temperament characteristics. Temperament, which generally defines the why and how of behaviors/actions, draws attention to differences in the ways individuals react to their environment (Greene, 2015). For instance, although Turecki and Tonner (2011) define the ten temperament characteristics in every individual, each individual responds to social life situations and daily activities with the temperament characteristics present in him/her. These temperament traits are less balanced in some individuals, either as too much or too little. Such a situation causes individuals to experience different problems. Children whose behaviors cannot be understood by others and experience problems within their environment due to excess or lack of temperament characteristics are considered difficult children. In this respect, difficult children are conceptualized as different from standards or the ordinary by the participating classroom teachers, or as Shimomura et al. (2020) have expressed, "children outside the norms". The study participants have also used definitions such as children who experience problems communicating with others, children who cannot control their behaviors, children who have learning and perceiving problems, and children who experience problems with their family.

Although the definitions of difficult children provided in the literature and those of the participating classroom teachers share similarities, there are also some differences. For instance, Greenspan and Salmon (2013) associate the reasons that cause children to be difficult children with temperament and divide them into personality types such as the sensitive children, the self-absorbed children, the defiant children, the inattentive children, the active/aggressive children, and children who cannot solve their problems. Similarly, in a study carried out by Owens and Ring (2007) with 12 child caretakers who had an average experience of nine years working with children, five types of difficult children were defined: biters, physically aggressive children, unruly children, destructive children, and loud children or screamers. The classroom teachers who participated in this study have made definitions that reveal that they also consider spoiled children due to familial and environmental factors, gifted children, and children with learning difficulties as difficult children. However, none of the participants has made descriptions regarding sensitive children.

In general, the participating classroom teachers are aware of the characteristics of difficult children discussed in the literature. They stated that they noticed the introverted, inattentive, or hyperactive/aggressive types of difficult children immediately. However, the number of teachers who associate difficult children's behaviors with temperament is quite limited. Temperament offers a point of view that would shatter the tendency to regard personal behavior as superficial. According to this point of view, each child is different, but accepting that individual differences are related solely to the social environment and education is misleading. The genetic characteristics form the

individual's temperament and give him/her a difference in all life steps specific to the individual (Thomas et al., 1970). This situation makes it obligatory to handle difficult children's problematic behaviors, keeping in mind both the personal factors shaped by temperament and environmental factors (Shimomura et al., 2020).

It was observed that the participating classroom teachers were more empathetic towards leader children, children who expressed themselves easier in the classroom, children who were seen as leaders by their peers despite their hyperactive actions, compared to children who were isolated or perceived as antisocial by their peers. During interviews, some participants talking about their hyperactive students had an expression on their face that was positive and reflected their love and secret admiration towards these children. Despite all the difficulties and naughtiness the classroom teachers experienced because of these children, their facial expressions reveal that such children are perceived as mischievous, sweet, or innocent. As one participant stated:

> "What I always say is this: As long as the child expresses himself/herself well, I can put up with all their naughtiness. Nevertheless, I believe that children who are quiet, calm, never get up or never raise their hands are much more difficult." (DAS6, F, 15)

Difficult children, who draw attention by the difficult situations they experience at home, school, and other social environments and are challenging for others, are sometimes labeled with such adjectives as different/unusual, problematic, and spoiled/naughty. Similarly, they are not usually fully understood by their peers and environment or even feel isolated (Erden, 2011). Thus, classroom teachers must know the positive sides of difficult children who cannot express themselves, rather than focusing on their negative aspects. They should also help them create awareness about their positive aspects. Indeed, some participating classroom teachers think that the most critical factor in handling difficult children is the teacher himself/herself. As one participant stated:

> "If a teacher consciously or unconsciously blacklists a child in a way, he/she is also blacklisted, blamed, and isolated by his/her peers, in the same way, all the time." (PS5, F, 11)

Accordingly, if the teacher cannot maintain a constructive dialogue with the student or evaluate the student's difficulties from the child's perspective, approaching the child and helping him/her becomes difficult (Graff, 2009; Marucci et al., 2018). Suppose difficult children who cannot fully explain what they experience and have difficulty making sense of their behaviors feel that they are noticed and understood by others. In that case, they develop feelings of trust, peace, and love. This situation, in return, causes difficult children to feel at ease. As one participant stated:

> "I resemble these children to candles. They are like candles that melt and destroy themselves. The candle burns and harms itself. In fact, they give out light, but it is difficult to see that. Difficult children have a light of their own, and one should see and feel that light. The child makes an effort to be noticed and asks others to notice him/her." (DAS6, F, 15)

Thus, teachers should first be willing to gather conceptual/theoretical knowledge about difficult children and later approach them with empathy using this knowledge. They

should understand the social dynamics among all the children from the child's perspective. They should play an active role in managing these dynamics (Hamm, Farmer, Dadisman, Gravelle, & Murray, 2011). Hence, it may be possible to contribute to children's social-emotional experiences at school positively. Similarly, some classroom teachers participating in this study have stated that difficult children's difficult characteristics cause them to be misunderstood and left alone. They have also stated that it is difficult to find solutions for these types of children. However, some other participants have argued that they accept difficult children with their inborn characteristics and make an effort to cause positive changes in these children. It seems that an emphatic approach plays an essential role in the attitudes of the latter type of classroom teachers. As one participant emphasized:

> "In my personal opinion, difficult children are different from others. I was also a different child. I always wanted to act and think differently. I wanted to act freely. This feeling made me do different, unexpected things. I believe that this was due to my nature. I used to get bored indoors. Naturally, classrooms are confined spaces, and when I see such a child, I can understand that child. I think about how I can make life easier for him/her." (CS10, M, 30)

In general, difficult children challenge life and those around them (Greenspan & Salmon, 2013). When this difficult challenge gets worse, the child's family and everyone around him/her get exhausted. However, being difficult, aggressive, and inattentive, or becoming different by isolating oneself from others is not a conscious choice of difficult children. In fact, when the factors that make a child difficult are identified, solutions also emerge. There are different ways to ease the problems that all types of difficult children experience. Although it is impossible to eliminate the factors that make a child difficult, it is possible to reduce these reasons if one knows them (Selcuk & Yilmaz, 2016). One of the main points emphasized by the participating classroom teachers concerning this topic is that as one gets to know the difficult children, it becomes easier to handle and help them. According to the participants, spending time with difficult children and trying to understand them has various advantages because this may also contribute to teachers' professional experience. As one participant stated:

> "A difficult child is like a magic box. You pick it up thinking it is difficult, but there may be nice things inside. You start by thinking that they are difficult and will make me wear out, but they come back to you with experience." (CS11, F, 20)

Consequently, it is believed that teachers must develop consciousness and awareness of the difficult child phenomenon. They need to offer each child help/guidance in the teaching-learning process specific to each child's temperament. According to this point of view, for a teacher to cope with aggressive behavior in class, the teacher needs to know which students have an aggressive temperament. Similarly, for a teacher to help a student socially excluded by peers, initially, the teacher needs to be aware of that student's temperament (Marucci et al., 2018). As Turecki ve Tonner (2011, p. 34) have pointed out, "A difficult temperament is a risk factor for future problems, and the thing that people try to prevent are emotional and behavioral problems that may emerge in

the future". When considered from this point of view, teachers have great responsibilities. For this reason, each teacher should:

- Have conceptual/theoretical knowledge about difficult children and develop himself/herself accordingly.

- Have a good understanding of difficult children's strong and weak aspects, communication styles, and other temperament characteristics.

- Observe children's social behaviors in the school environment and create awareness about these behaviors.

- Not let peers exclude or label difficult children or harm them physically, emotionally, or socially.

- Develop and implement strategies to convert difficult children's negative characteristics to advantages.

- Allocate enough time to difficult children and each child in the classroom and get to know them well.

- Accept and love each child unconditionally.

Conclusion

In this study, classroom teachers' perceptions of difficult children were examined. It is believed that this study contributes to a better understanding of the difficult child phenomenon in Turkey. On the other hand, the difficult children perceptions presented in this study are limited to the observations, experiences, and opinions of the participating classroom teachers; hence, it would be a too strong argument to generalize these findings to all school teachers in Turkey. Thus, it is believed that conducting similar studies with different branch teachers in different parts of Turkey and different types of schools will contribute to understanding the difficult child phenomenon more comprehensively. There is also a need for detailed research focusing on teachers' strategies to get through different types of difficult children and their success stories. For instance, in a study conducted by Saban and Saricelik (2018) using the narrative analysis method, a classroom teacher's effort to communicate with an introverted child was studied in detail through stories narrated by the teacher. Similar studies may be conducted on difficult children perceived as aggressive children, unruly children, or rebellious children. Such detailed studies are also vital for pre-service teacher training. Finally, it was found out that oversensitive children, a type of difficult children, were not fully understood or realized by the participating classroom teachers in this study. Thus, it is believed that studies on this topic will contribute to the understanding of this type of difficult children better.

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Reflections of COVID-19 Pandemic on Autism Spectrum Disorder: A Descriptive Case Study

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Abstract: The aim of this study was to explore type of studies implemented for the autism spectrum disorders (ASD) community by institutions that directly deal with ASD during the COVID-19 pandemic in Turkey and in the world. The descriptive case study design was used in the study. The contents on the websites of the institutions were analyzed through document analysis. According to the results, it was observed that the data consisted of supporting contents related to education, health, and public policies regarding the COVID-19 process and that the contents were frequently presented through webinars, visual representations, electronic text sources, online communication platforms, and social media environments. During this process, informative studies were frequently carried out and practical studies were rarely conducted. While it is considered that institutional studies both in Turkey and in the world may serve as an example to other institutional studies, it is considered that the diversity of these examples should be increased through cooperation between institutions.

Keywords: Coronavirus, COVID-19, pandemic, autism spectrum disorders, parents, special education, institutions

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Introduction

As a result of the coronavirus (COVID-2019) epidemic that emerged on December 2019 in China and rapidly increased mortality, the World Health Organization (WHO) identified COVID-19 as a pandemic on January 30, 2020 (WHO, 2020). Due to the rapid spread of COVID-19 via human contact, a number of measures were taken to control the pandemic. In addition to curfews, self-isolation, 14-day quarantine, and social contact, gathering spaces were also closed. Due to these measures taken to slow the spread of the Covid-19 pandemic, educational institutions were closed in several nations (Figure 1). Consequently, the education of 1.6 billion students, equal to 90% of the global student population, was interrupted (UNESCO, 2020a; 2020b; UNICEF, 2020).
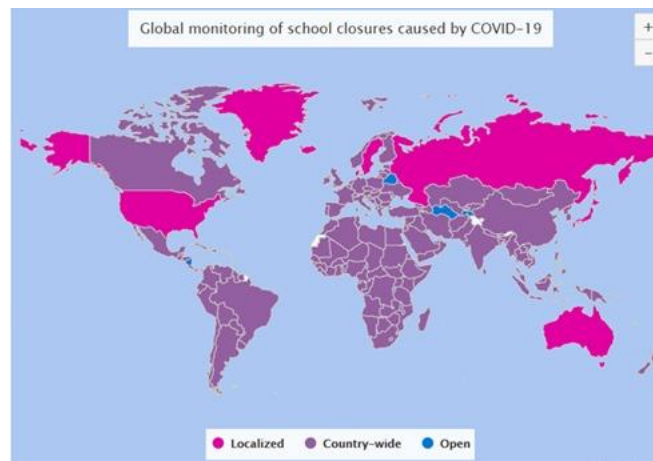
Figure 1. Global school closures as of April 15, 2020 (UNESCO, 2020a)

Thus, emergency distance education methods were adopted immediately to provide online and offline educational content and to prevent the interruption of educational services (Bozkurt & Sharma, 2020a, 2020b; Bozkurt et al., 2020). During the pandemic, parents who were isolated at home with their children assumed certain social responsibilities as well as educational roles (Bozkurt et al., 2020; Devercelli, 2020). Especially women who provided childcare were disadvantaged due to the increased pressures (Bozkurt et al., 2020). During the COVID-19 pandemic, all children and parents were affected; however, the children and parents with special needs and require support were the most affected group (Bozkurt el al, 2020; Guterres, 2020).

Immediate measures such as staying at home, complying with the rules at home (i.e., disinfecting hands, wearing masks, staying at home), and adopting new routines could lead to difficulties especially for individuals with autism spectrum disorder (ASD) who experience problems in comprehending sudden stressful situations, understanding social-communication cues, and who are extremely resistant to changes in routine (den Houting, 2020; Weir et al., 2020). Routines that help us organize our domestic, educational, and professional life are very important to feel the confidence that is

derived from regular, predetermined, and stable activities (Bozkuş-Genç, 2019). The unexpected changes in these routines and rules, which are important for individuals to feel comfortable and safe, lead to various psychological and physical problems such as trauma, depression, and psychological pressures even in children with typical development (Cao et al., 2020) and become difficult to understand and manage for children with ASD and their parents who are strictly bound by routines (Altable et al., 2020; Narzisi, 2020). The limitations encountered by children with ASD and the deterioration of their routines are considered difficult to manage (e.g., fear from the virus, disappointment, deprivation, finding it boring to conduct homeschooling, and feelings of anger, etc.) (Stankovic et al., 2020; Tarbox et al., 2020). In a study conducted by Stankovic et al. (2020), it was reported that parents with children with ASD were scared about their children to exhibit problem behavior such as over-selectiveness about food or insistence on eating the same food. When asked about their greatest concern about the pandemic and the emergency, parents stated that they were worried about a possible increase in or intensification of ASD symptoms due to changes in daily routine (e.g., non-attendance to school or kindergarten, continuous repetition of news reports on infection, etc.) and the child losing the previously acquired or learned skills rather than the infection itself. Since institutional interventions have totally changed in environments such as schools, hospitals, and businesses, the social support provided for the children with ASD and their parents who receive specialist support from relevant institutions in many areas (e.g. social-communication, self-care, vocational, psychological, etc.) is expected to decrease and these groups are expected to exhibit higher levels of stress (Altable et al., 2020; Bakér-Ericzen et al., 2005; Stankovic et al., 2020). Considering that individuals with ASD are more likely to develop anxiety, distress, and depression in the face of uncertainties (Mazefsky et al., 2008; Yirmiya & Shaked, 2005), it is likely that limitations in daily life would disrupt the daily routine and would affect the psychological health of several individuals with ASD (Wright et al., 2020). The present and inadequate support provided for these families, the feelings of helplessness, and various difficulties that these families experienced in the past deteriorated during the pandemic (Huremović, 2019). Thus, it was reported that it was important to quickly create new and functional resources to ensure the collaboration between parents, therapists, and researchers for the safety and peace of this group of children and allow them to quickly adapt to the "new normal" during the COVID-19 pandemic (Tarbox et al., 2020).

It is important for the specialists who work with children, adolescents and adults with ASD and their families to seek various means of support to reach these groups in these challenging and uncertain times (Narzisi, 2020). During the pandemic and the post-pandemic periods, everyone tries new methods for the individuals with ASD and their parents to communicate with each other and provide alternative ways to access support, therapy, education, and social services. Thus, these challenging times and changes could also provide an opportunity for several problems associated with ASD. ASD advocates and/or related institutions that have spent efforts to develop means to provide access for individuals with ASD to social areas, health services, education, and employment for several years could realize and improve certain ideas such as online

appointments, evaluation, distance education, and development of support communities that they could not implement before (Cassidy et al., 2020). Thus, several institutions that advocated the rights of individuals with ASD (e.g., Autism Society, Autism Speaks, Seed Autism Foundation, etc.) conducted various studies and provided support for parents and individuals especially in educational-behavioral areas during the pandemic. In these extraordinary times, these studies conducted by institutions are more significant than before; these are also important in laying the foundation and providing guidance for future work, raising awareness about other institutions in the field, and revealing the scale of the cooperation. Due to the possibility of future waves of the pandemic or similar challenges (e.g., natural disasters such as earthquakes, floods, etc.) and interruption of education, it was suggested that better strategic plans are required for ASD (Huremović, 2019). Thus, it is necessary to present the studies conducted by these institutions directly working in the field of ASD for individuals with ASD and their families. Based on these ideas, the present study aimed to discuss the studies conducted by international and domestic ASD organizations to benefit the ASD community during the COVID-19 pandemic. Thus, the following research problems were determined to inquire the studies conducted by ASD organizations in the world and in Turkey to inform individuals with ASD, their parents, and other care/service providers during the COVID-19 pandemic:

1. What kind of support services are provided?
2. Which support materials and media are utilized?
3. What is the level of coordination between the institutions?

Methodology

The Research Design

The current research was a descriptive case study, a qualitative research method (Yin, 1984). Case study is a research method that allows the researcher to investigate a phenomenon or an event that was not controlled by the researcher in depth based on "why" and "how" questions (Yıldırım & Şimsek, 2016). The main aim is to discover, describe, and interpret a case as is (Yin, 1984). On the other hand, a descriptive case study aims to describe an intervention, a phenomenon and a real-life context in which it emerges (Merriam, 1998; Yin, 1984). Thus, the study aimed to determine the work conducted by domestic and international ASD organizations during the COVID-19 pandemic, which is a current phenomenon.

Data Collection and Analysis

The study data were collected and analyzed with document review (Bowen, 2009). The document review process included four stages: in the first stage, the inclusion and

exclusion criteria were determined for the domestic and international ASD organizations and COVID-19. The institutions selected for review were determined based on the following criteria:

- An organization that provides informative content and material on educational or health services associated with ASD and COVID-19.

- The presence of online educational modules for individuals with ASD and their parents.

- A local or global pioneer organization that advocates ASD rights.

Exclusion criteria were determined as follows:

- Providing only content on COVID-19-related health services

- Conducting work that aims to provide information for general population

- Focus on individuals with special needs instead of individuals with ASD

- Providing only news reports or announcements instead of informative content

- Non-governmental ASD organizations or ASD associations

In this context, eight institutions that met the inclusion criteria were determined for in depth analysis: "Autism Awareness, Autism Speaks, Autism Society, Autistica, Center for Autism and Related Disorders (CARD), National Autism Center (NAC), National Autistic Society, and Seed Autism Foundation." There were several small associations or organizations in Turkey or elsewhere that could not be included due to the selection criteria. For example, in Turkey, it was observed that Turkish Autism Council, Autism Society Federation (ODFED) and Autism Personal Support Foundation (OBIDEV) provided brief notices or announcement associated with the COVID-19 pandemic and individuals with ASD. Furthermore, certain institutions [e.g., World Health Organization (WHO), Center for Disease Control and Prevention (CDC), American Psychiatric Association (APA)] were excluded on the grounds that they provided only general information about COVID-19 instead of special information pertaining to ASD and COVID-19. In the second stage, the content of all documents such as biographical articles, interviews, videos, photos, webinars, blog posts, online training programs, news, reports, guides, books, articles etc. found on the websites of the institutions included in the study were reviewed in detail as primary data sources. Furthermore, associated links, corporate posts on social media such as Facebook, Instagram, and Twitter were also included in the analysis to support the primary data source. In the third stage, the files collected from the relevant institutions were filed for analysis. The files were uploaded to Google Drive that allows the researchers to store documents on the cloud, share files and organize documents for collaboration. In the final stage, the study data collected from the institutions were analyzed with document analysis. Initially, all website content was transferred into documents and the associated codes and themes were determined based on the document analysis, and finally, the themes were edited. The authors participated in this process via teleconference, and

disagreements were resolved by discussions. The themes were visualized and presented as figures and explained in detail in the findings section.

Validity and Reliability

One of the methods to ensure validity in qualitative studies is to report the data in detail (Yıldırım & Şimşek, 2016). Thus, institutional documents about COVID-19 and ASD were analyzed and reported in detail, and data were also presented for the readers to add their comments. Another approach used to ensure and improve reliability in qualitative studies is diversification (Seggie et al., 2017; Oppermann, 2000; Yıldırım & Şimşek, 2016). In the present study, author diversification was adopted by reaching different perspectives and views of experts.

Thinking with the data is an extremely important issue in data analysis to ensure content integrity (Glesne, 2011). Otherwise, data correlations could be missed, or themes that are not related to the study aim may be determined (Bryman, 2012; Seggie et al., 2017). Thus, the codes and themes were determined with the collaboration of all authors via teleconference during the analysis to ensure the content integrity based on the study aim. Furthermore, coding reliability was established by an independent expert.

In case studies, similar to the other qualitative research methods, the role of the author is quite important in data collection. The present study authors have published various academic studies on ASD and/or qualitative research. It was suggested that the role of the authors provided an endogenous Turkish and global perspective, and the study data were collected from primary resources, strengthening the research. Furthermore, to ensure the study reliability, an audit trail, where an independent reader with experience on the study topic verified the study findings by following the method employed by the authors, was employed.

Findings

In the present study that aimed to determine the work conducted by Turkish and international ASD organizations for ASD community during the COVID-19 pandemic, the work conducted by eight organizations that met the selection criteria were analyzed. The information about these organizations is presented in Figure 2.

Figure 2. Analyzed institutions

As seen in Figure 2, all institutions that shared content to assist individuals with ASD during the COVID-19 pandemic were those that directly served the global autism community. The analysis of the review reports (raw data) for each institution revealed the main themes of (1) assistance for the COVID-19 pandemic, (2) the utilized support material and media, and (3) the interinstitutional cooperation. These main themes could differentiate in sub-themes and codes for each institution based on their work. In the following section, the findings associated with the assistance commonly provided by all institutions and those unique to certain institutions, the type and the media of the support material employed by the institutions, and interinstitutional cooperation are presented.

Common Support Services Provided by the Institutions

The review of the common support services provided by the institutions demonstrated that they provided similar content, especially in the fields of education and health. Furthermore, each institution had online support lines to communicate with individuals with ASD and their families. Common support services offered by institutions are presented in Figure 3.

As seen in Figure 3, the similar support services could be categorized in three main themes: education, health, and support lines. Educational content included four sub-themes: coping with the pandemic, uncertainty and the balance in domestic life, work-personal life balance of adults with ASD, and adaptation to the new normal. In educational content, all institutions provided visuals that reflected basic rules such as the required hygiene for protection from the COVID-19 virus, social distancing, and the isolation at home. Based on the possible effects of the uncertainty on individuals

with ASD, the institutions developed content on issues such as behavioral management based on evidence-based applications and new routines in coping with uncertainty. In the employment of individuals with ASD, content associated with telecommuting and the development of new work routines were also provided by all institutions. Furthermore, the novelties that would be introduced by the process called the "new normal" and how to prepare for the new normal were also addressed.

SIMILAR SUPPORT CONTENTS OFFERED

Figure 3. Similar support services provided by the institutions

The review of the support services provided in the field of health revealed psychological health assistance was developed to cope with stress, anxiety, and to manage the crisis induced by the pandemic. Access to various comforting activities were provided, and the links to relaxing artistic, musical, and travel-related applications that could be selected based on personal preferences were provided to improve psychological health and to support the development of new domestic routines. Furthermore, telehealth applications were provided to access healthcare services. Information on physical personal and environmental hygiene was developed to control the pandemic and to ensure permanent behavioral changes during the transition to the new normal.

Always accessible ASD support lines were provided to establish effective and continuous communication with individuals with ASD and their families. These lines were developed specifically for the pandemic by certain institutions under different names such as Autism Support Line, Life and Crisis Support Line, Autism Learning Line, and certain others utilized the existing live chat line on their web sites or social media.

Unique Support Services Provided by the Institutions

Certain institutions also developed unique content in the fields of education, health and public policy. As seen in Figure 4, Autism Awareness provided educational content, tips, and an online platform for individuals with ASD to communicate with each other. CARD offered virtual socialization opportunities such as online drama courses, musicals, life skills workshops, and virtual nature trail excursions for individuals with ASD who stay at home during the pandemic. Furthermore, CARD was the only institution that called for the participation of the online community and developed information, news reports and advertising campaigns for this purpose. Autistica, on the other hand, focused on the interruption of diagnostic and evaluation services during the pandemic, which was one of the most important issues for individuals with ASD, and provided information about the diagnostic and evaluation alternatives during this period. Furthermore, they emphasized the increase in mortality rate among nursing homes residents with ASD.

The Autism Society provided assistance for families for school closures after the schools were closed with a sudden decision during the pandemic, leading to changes in the daily routine of the individuals with ASD as they started to spend all their time at home. Supportive content on school closure and information on how to continue education at home were provided.
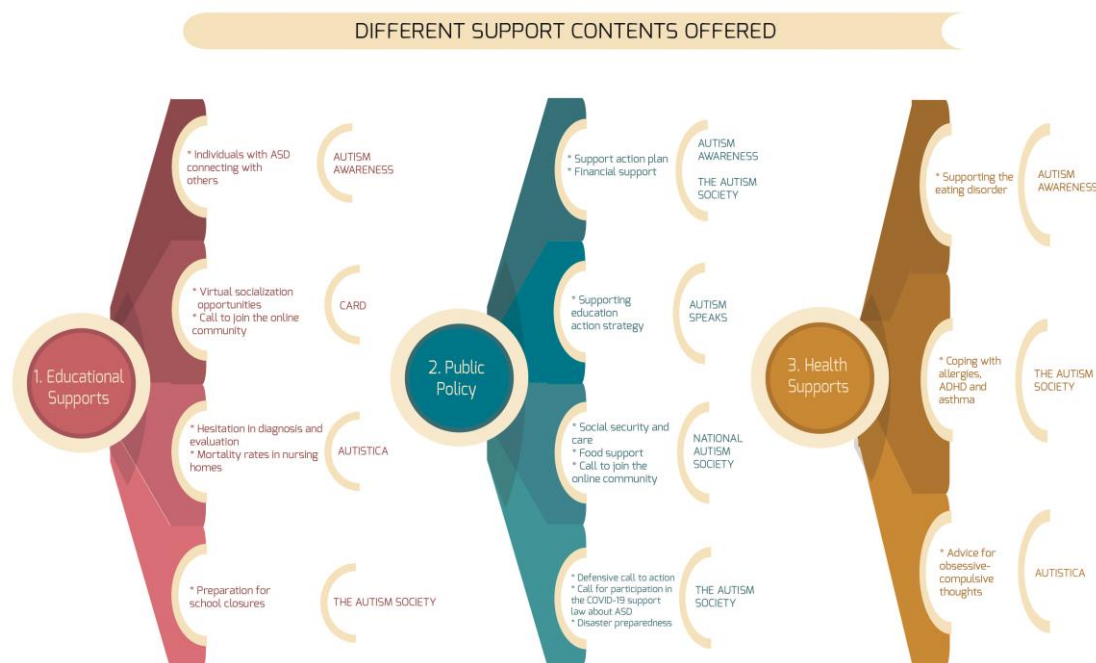
Figure 4. Different support services provided by the institutions

Employed Support Material and Media

The institutions reviewed in the study employed various online media and material to present the COVID-19 support services. These support material and media are summarized in Figure 5.
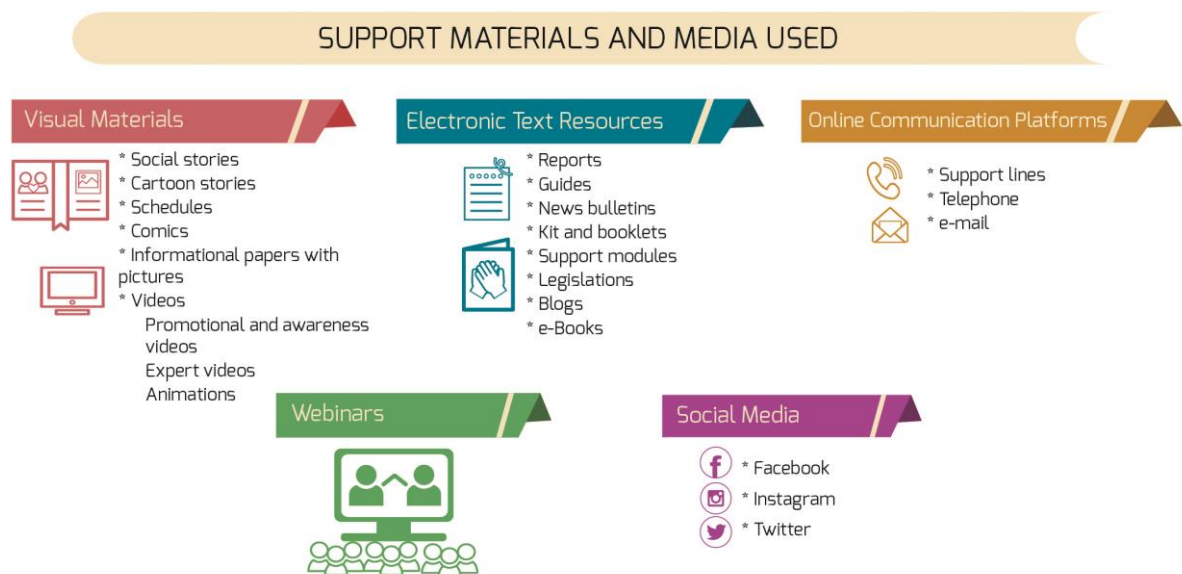
Figure 5. The support material and media employed by the institutions

As seen in Figure 5, the institutions employed support material and media such as visual stories, electronic texts, online communication platforms, webinars, and social media posts. It should be underlined that visual stories frequently included social stories and charts, and the content was supported by visuals whenever possible. In addition to the promotional videos that aimed to raise awareness about ASD, short and long videos and animations with professional narration on various educational topics were also employed. Furthermore, webinars were organized in the live broadcast format, where the participants could be registered, and these seminars were recorded and provided for future use. Unlike other institutions, Autism Awareness provided animated stories, National Autistic Society developed animations, and Autism Society included cartoons.

Institutions conducted effective information sharing activities using reports, guides, news bulletins, kits and booklets, support modules, e-books and information on legal regulations, and interactive blogs on their web sites. NAC employed limited electronic material and media such as manuals and newsletters.

The institutions employed online communication platforms such as phone lines, live chat, and e-mail facilities for communication and support line purposes in addition to visual stories, webinars, and electronic texts. Similarly, organizations actively posted on their social media accounts for both to communicate and share content with their

audience. The analysis based on the institutions revealed that the most diverse support material and media use were exhibited by the Autism Society, National Autistic Society, Autism Awareness, and Autism Speaks. Seed Autism Foundation, on the other hand, provided Educational Information Network videos in collaboration with the Ministry of National Education and employed kits, booklets, and mobile applications on COVID-19.

Interinstitutional Cooperation

The institutions reviewed in the study also provided links to other institutions and material developed by different institutions on their web sites. The interinstitutional cooperation is presented in Figure 6.

Figure 6. The support content developed by other institutions and shared by the reviewed institutions

The reviewed institutions employed the information provided by the WHO, CDC, and UNICEF web sites about the pandemic and prevention in their content on health. Furthermore, the institutions employed the health information provided by APA, NHS, IRS, CMS, NICE, and Careers UK during the pandemic. NPDC, Autism Europe, Autism Resource Center, IPSEA, ACL, Stage Learning, SAMHSA, GoNoodle, Pinterest, Scouts, Educatingalllearners (EALA), and MNE were the prominent institutions that provided educational content. The public policy content provided by large institutions such as Feeding America and Food Pantries included information about soup kitchens and nutritional support. The institutions that cooperated with other institutions the most included the National Autistic Society and Autism Society. Also, it could be suggested that among other collaborating institutions, WHO, CDC, and UNICEF were the leading institutions and cited more than one institution on their web sites.

Discussion and Conclusion

Based on the findings of the present study, conducted to determine the support provided for individuals with ASD by institutions that conducted COVID-19 studies, it was observed that the eight institutions included in the present study provided several facilities for the communities interested in ASD, including individuals with ASD, their families, and specialists. The analysis of the work undertaken by these institutions revealed three main themes: support information, employed support material and media, and interinstitutional cooperation; and common and unique efforts of these institutions are presented.

The review of the support services offered by the institutions demonstrated that all institutions focused on the understanding and infection prevention methods, domestic crisis and coping with crisis, changes in routine, behavioral and psychological health problems, and methods to cope with these problems. The institutions focused on these issues since due to the COVID-19 conditions, home environment became the only environment where the family members spent time (degli Espinosa et al., 2020). It was necessary to develop new routines/activities at home. However, due to limited delivery of non-essential items, parents experienced difficulties in providing toys or other products to ensure that children with ASD could spend time with their siblings and develop new interests, and develop novel means (degli Espinosa et al., 2020). Thus, it could be suggested that parents could not develop new routines due to the limited environmental and material facilities at home, and children with ASD experienced difficulties in coping with the stress and anxiety induced by the disruption of their routine. Second, although the COVID-19 pandemic had an extraordinary impact on the lives of families all over the world, parents of children with ASD were suddenly deprived of services and personal support facilities such as practical behavior analysis, and the education of their children became a serious problem (Tarbox et al., 2020). In this process, distance education could be very challenging and destructive for children with ASD and their parents. This sudden change also imposed further responsibilities on parents such as simultaneous roles as a parent, a special education teacher for their children with ASD, and the caretaker of their other children while conducting their businesses at home. In this process, it was a fact that families needed guidance from a special education specialist for the acquisition of skills and behavior necessary for the development of their children and to reduce problem behavior. Third, both children with ASD and their parents experienced stress. It was reported that the parental stress level was associated with the type of disability or disorder of the child (Gupta, 2007). Mothers of children with ASD experience higher levels of stress when compared to mothers of children with other developmental disabilities (Abbeduto et al., 2004; White & Hastings, 2004) or children with typical development (Baker Ericzén et al., 2005; Yamada et al., 2007). It is known that individuals with ASD, as well as their parents, are more stressed and suicidal when compared to individuals with typical development (Bishop-Fitzpatrick et al., 2017; Cooper et al., 2017). It was reported that adults with ASD experience painful effects of social isolation and solitude, which leads to a real impact on their psychological health and the risk of suicidal tendencies (Hedley et al.,

2018; Pelton et al., 2020). The impact of the pandemic on the mental health of adults with ASD is truly worrisome. Thus, the quick response of the institutions to the needs of the families was remarkable. However, the informative quality of the support services is also an important part of discussion. It is very important to inform the parents and individuals; however, the implementation of this information could be challenging for the parents. Therefore, applied support services training is extremely important for the parents. Although it could be argued that a practical training could not be planned for a sudden pandemic, this issue should be emphasized during the transition to the new normal.

Providing employment of information for adults with ASD are particularly important. Individuals with ASD, similar to any adult individual, may also have concerns about employment. Individuals with ASD experience difficulties in coping with employment anxiety after graduation. Especially due to additional challenges introduced by the pandemic, the stress they experience about employment was compounded exponentially. Informative support on coping mechanisms is required. It is necessary to identify and discuss the challenges and opportunities that COVID-19 pandemic introduced for adults with ASD based on various perspectives (Cassidy et al., 2020). Especially for individuals with ASD, institutions should identify the problems specific to ASD and provide further information and support services about businesses and job opportunities suitable for these individuals, develop collaborative employment projects for individuals with ASD, improving the participation of these individuals in professional and social life.

Transition to the new normal is another issue of current debate. Associated changes, aptly christened the new normal, have been gradually implemented globally. The transition to the new normal is a novel experience for all. Thus, the focus should be on the preparation of the individuals with ASD for the new normal. Measures that should be adopted during quarantine and outside the home during the transition to the new normal introduced new duties and responsibilities for the individuals with ASD. Certain children could insist on pre-pandemic rules during the transition. For some individuals with ASD, this may manifest itself as challenging behavior in daily life. During the instruction of the rules that these individuals experience difficulty with, the location of learning, the instructor, daily activities, implementation of these measures, and associated emotions should be described clearly (Tarbox et al., 2020).

For them to get through this process easily, parents have a great responsibility. The implementation of domestic measures for the preparation of these individuals for new life experiences would surely be difficult, complex, tiring, and introduce additional burden for the parents. Thus, institutional support could be needed. However, although the transition to the new normal has begun, it is necessary to consider the possibility of experiencing the same issues in the future. Turkey and other countries could experience epidemics or natural disasters in the future. Therefore, information should be provided in advance about the measures that should be implemented during extraordinary situations such as pandemics, natural disasters, and during the following periods to ensure readiness and planning. Efforts should be maintained to ensure free online

facilities that could be planned and accessed immediately or quickly even following the epidemic.

On the other hand, the review of the support services offered by the institutions demonstrated that these services varied between the institutions. For example, the issue of the effects of the delay in the evaluation of children with ASD on the parents is extremely important. Similar to all special need groups, early diagnosis is quite important in ASD. Medical examinations by pediatricians and pediatric neurologists (Baird et al., 2001), the primary care physicians who could provide early diagnosis, were interrupted during the pandemic, preventing educational evaluation in the institutions. The interruption in evaluation led to delays in early intervention. However, early intervention could improve the performance of the child, and these children adapt better to normal educational institutions. On the contrary, it was reported that the children could experience significant difficulties when the intervention is delayed (Kandasamy, 2018; Ünal & Pehlivantürk, 2004; Zwaigenbaum et al., 2015). Since early childhood interventions not only support the personal development of children but also include a process where several support services are provided to improve parental skills and promote the social participation of both parents and children, delaying the evaluation would not only postpone the initiation of the education, but also the therapy, health, social work, counseling services, etc. (Bakkaloğlu, 2020; WHO & UNICEF, 2012) Thus, children with ASD and their parents who cannot receive institutional intervention under the current conditions are expected to experience higher levels of stress (Altable et al., 2020). Therefore, providing information remotely to the parents is extremely important. It is necessary to develop remote evaluation remote methods that utilize advanced technologies in the future.

The institutions also differentiated on the issue of ASD and comorbid diagnoses and disorders. Obsessive-compulsive disorder, allergies, ADHD and asthma, and eating disorders could be observed as comorbid disorders. Literature review revealed that attention deficit and hyperactivity (Hendriksen & Vles, 2008; Simonoff et al., 2008), obsessive-compulsive disorder (Bejerot, 2007; Hendriksen & Vles, 2008), eating disorders (Dell'Osso et al., 2018; Huke et al., 2013) could be observed at a higher rate among individuals with ASD when compared to the general population. It was anticipated that the above-mentioned comorbid disorders could lead to further difficulties during the pandemic. Examples of these additional difficulties include the anxiety induced by the uncertainty about the duration of the pandemic, the empty shelves in the markets, the limitation of the access to desired brands by the availability of the inventory, or the provision of alternative products to the desired products. In a study conducted by Stankovic et al. (2020), it was reported that parents' anxiety levels increased when children with ASD insisted on eating the same food or were over-selective. It was suggested that parents may require collaborative specialist support in these cases.

The parents were also often concerned about socialization (Gray, 2002; Havighurst et al., 2010). Since the individual socialization methods had to change in this process (Wright et al., 2020), it could be argued that it was more difficult for individuals with

ASD who already experience difficulties in social interaction and communication (Hattier & Matson, 2012; Lin et al., 2019). It was suggested that isolation during the pandemic could regress or falter certain previously acquired skills. This was among the biggest concerns of the parents (Stankovic et al., 2020). Thus, the fact that CARD planned virtual activities for individuals with ASD for distance socialization such as dramas, museum and park visits was significant, albeit insufficient. Therefore, it is important to focus on this spectrum-specific condition further.

Funding legislation and emergency public policies were rarely addressed. Certain institutions called for action. It could be suggested that emergency strategies should be implemented to amass resources such as social security and care services, insurance, food, and housing and make them available for individuals with ASD during the pandemic. The advocacy efforts of the institutions to address the increasing needs and diverse demands of individuals with ASD and their parents and to develop public services could accelerate the developments. For example, in Turkey, Autism Action Plan (AAP; 2016-2019) determined targets for the rights of individuals with ASD and their parents to improve their living conditions and identified the obligations of the related public institutions. It was considered necessary to design a new action plan for individuals with ASD after the pandemic.

The review of the employed support material and media demonstrated that institutions used visual stories, and especially social stories to assist children with ASD to understand coronavirus, prevention methods, routines, etc. In this context, the social stories authored by Carol Gray and charts were provided for the parents free of charge on several institution web sites. The institutions especially preferred these support materials since social stories are an auxiliary visual support facility developed to explain the social status of the individuals with ASD and assist them to exhibit adequate reactions (Gray & Garand, 1993; Sani-Bozkurt et al., 2017; Smith et al., 2020), and charts are effective on planning changes in routine and facilitate the transition from one activity to another (Banda & Grimmett, 2008; Flores et al., 2012), and both social stories and charts are evidence-based applications (NCAEP, 2020). In addition to providing social stories and charts as support material, an institution should also provide information about the implementation of these applications. Both applications have specific advantages, and these should be explained to the parents. In addition to the social stories and charts, all institutions provided videos with expert narratives or electronic texts for individuals with ASD and their parents. These resources both aim to inform and raise awareness. Furthermore, the organization of free webinars on various topics and social media posts improved the dissemination of knowledge. Especially, most institutions aimed to reach families using different methods by providing phone, e-mail, or live chat support to assist the problems experienced by families with adults or children with ASD. In a study, Stankovic et al. (2020) posed the question "How do you prefer to be informed about how to treat your child during a pandemic or an emergency?" and 43.5% of the parents preferred online assistance, while others preferred the school staff, healthcare professionals, child psychiatrist, or a pediatrician. Thus, it could be suggested that these preferences could be due to the fact that not

every family has the same level of access to information and communication technologies. Since technological facilities available for each household such as computers, network, mobile phones, tablets, income, education, age, etc. are different, their competencies and skills in using these technologies would differ as well (van Deursen & van Dijk, 2010; van Dijk, 2006). In addition to the use of technological tools such as computers, information could be shared on various mass media such as TV, which is available in most homes that do not have internet access. Legislation should be focused on the needs of individuals and families who are the members of the poorest class in the society and with severe ASD and limited opportunities (TİHEK, 2020).

Autism Awareness institution provided different support material and media when presenting information during the pandemic. The institution developed the same content as both an audioviusal file and electronic text. This flexible presentation where options were available could encourage the individuals with different preferences to access information. CARD, on the other hand, allowed the staff to share personal information on social media to reach families better and allowed the parents to collect information about the staff that would assist them. This facility could also show the parents that they were not alone in the process.

Autism Awareness institute provided animated stories and National Autistic Society provided cartoon chat and animations about coronavirus, especially for young children with ASD. Previous studies reported that animations facilitated learning of children with ASD (Ho et al., 2019; Holmgaard et al., 2013; Parette et al., 2011; Walsh & Barry, 2008). Child-friendly animations for the younger age groups would motivate children with ASD, support their imitation skills and contribute to their learning.

The review of the interinstitutional cooperation revealed that the uncertainties necessitated coordination between public institutions and non-governmental organizations to meet the increasing needs and diverse demands, educational needs of families with autistic members and individuals with ASD, improve their quality of life, ensure the sustenance of care services, and meet several other requirements. In this process, it was great to observe that the institutions reviewed in the study collaborated with health and education institutions as well as those that worked directly with individuals with ASD. This was considered important since it demonstrated that the institutions took the responsibility to meet the novel requirements and lend a hand to one another when necessary.

The review of the cooperation among Turkish institutions revealed that only Seed Autism Foundation collaborated with MNE. The collaboration between these two important institutions in Turkey could be considered a positive development, albeit insufficient. In fact, interinstitutional cooperation is the first among the six priorities determined in the AAP (2016-2019), which was developed to ensure equal utilization of the services provided for individuals with ASD and to facilitate their participation in all areas of social life independently. The action plan especially emphasized strengthening interinstitutional cooperation to ensure the continuity of medical,

educational, and support services (OEP, 2016). Thus, direct collaboration between the ASD institutions in Turkey, especially during times of emergency, is more important than ever.

It could be suggested that the emerging need for both educational and health support and the development of public policies improved collaboration among the individuals, society and institutions, and these efforts were good examples of solidarity, albeit limited. The analyses demonstrated that critical steps were taken to ensure the interaction and cooperation between experts in various disciplines employed by different institutions and organizations around the world and a common ground could be reached faster to cope with a similar pandemic or disaster in the future, which is a positive development.

In conclusion, the review of the work conducted by institutions all over the world demonstrated that the institutions responded rapidly to the needs during the pandemic. It should be noted that experts or institution proprietors who directly interacted with individuals with ASD developed various material and provided information free of charge. In this process, informative studies were often conducted, while practical work were mostly neglected. The efforts in Turkey were similarly informative services. It was observed that Seed Autism Foundation provided several services for individuals with ASD and their families such as social story material, free mobile applications in Apple Store and Google Play, resource documents, skill sets, support units, and webinars conducted on Zoom and Facebook during the pandemic. The work conducted by the Seed Autism Foundation in Turkey could be considered as an example for other institutions, while it was considered necessary to increase the number and diversity of examples through interinstitutional cooperation. Thus, ASD advocates and/or relevant institutions should analyze the current work on the reduction of the impact of the pandemic to create a more inclusive society in the long term, and to guide future studies.

It was considered necessary to indicate that there could be studies on the support services offered by the institutions reviewed in the present study for individuals with ASD and their families during COVID-19, the support material and media utilized by these institutions, and interinstitutional cooperation currently in development as this article was authored. Thus, the following recommendations are presented for future applications:

- In times of limited physical contact, data-protected user-friendly systems that do not rely on competencies and skills such as telehealth and telepsychiatry could be developed and employed by all age groups.

- Massive online databases that include quality material could be developed and made available for all.

- Online interaction-based applications and support services could be developed.

- Infrastructure and systems could be developed for distance family counseling and applied parent training.

- A distance educational evaluation and information/counseling system could be developed.

The following could be recommended for future studies:

- Longitudinal studies could be conducted to determine the long-term impact of the pandemic on the experiences/quality of life of children, adolescents, and adults with ASD and their families.

- Future studies could be conducted on the experiences of individuals with ASD and their families in distance education.

- Future studies could be planned to determine the assistance required by individuals with ASD and their families during the transition to the new normal.

- Empirical or mixed studies on the impact of the pandemic on the social skills of the children with ASD could be conducted.

- Applied research could be planned on the instruction of the physical and psychological prevention skills to individuals with ASD during the pandemic.

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A Semiotic Analysis of Digital Educational Games with Religious Themes for Children

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Abstract. Digital educational games with religious themes designed for children are examined in this study. Some of these digital games have educational content which can help in the learning of religious knowledge through the game experience and turning it into practice. Digital games of a religious theme are also designed and offered to consumers on digital platforms in Turkey. In this context, four games named "Path of Heaven", "Power of Religion", "Hereafter Quiz" and "Treasure Island" were analysed using Roland Barthes' semiological method. The children's religious (digital) socialization is discussed through signs which have the denotation and connotation meanings in these games. It is found that educational digital games with religious themes are functional for children's religious socialization, but the signs and content need to be pedagogically controlled. It also seems that it is important for parents to check (tracking digital footprints) whether the games are sterile or not.

Keywords: Religion, digital educational game, religious socialization

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Introduction

Digital games have become an important part of the daily flow for "digital natives" (Prensky, 2001). Digital natives who spend a significant part of their time experiencing digital games, both consume and produce a digital gaming culture via many technological vehicles (such as desktops or laptops, tablets, smartphones and games consoles) and with the online movement possibility provided by the Internet (Aygul & Apak, 2019, 143-144). Playing games has functions such as increasing cognitive capacity, supporting social behaviours, arousing curiosity and improving awareness. According to Huizinga (2006, 17), a game is a meaning establisher and carrier in the social structure. A game has a functional position in learning, repeating and internalizing certain roles in the course of the socialization processes of children. Games that open to interaction inherently and have a competitive environment from time to time are performed using certain rules and ultimately this ensures that social roles are learned (Berger & Luckmann, 2018, 193). Do the things stated regarding the social functions of traditional games also apply to children who socialize in a virtual environment/space and spend a significant part of their time playing digital / video/computer games? In other words, can children who experience digital games participate in society with the knowledge and skills they have acquired and ensure regeneration of society?

While digital technologies and the possibility of online mobility have created various opportunities for children, they can also bring with them certain risks. On the one hand, "victim children", who are captured by computer games, can be exposed to pornographic visual and other images of violence, while on the other hand, it gives rise to "new digital generations" who learn and discover through information and communication technologies. The individual and social ties which are experienced between hope and fear stem from a fundamental distinction between "education" and "entertainment" in the digital world. While the educational promise of digital technologies is a reality that is accepted by many people without question, the entertainment part can be generally seen as morally damaging and culturally worthless (Buckingham & Sefton-Green, 1999, 5). Thus, digital games can have both benefits and harms for children who build their identities and socialize through digital culture.

Playing digital/video/computer games for children is known to have many negative effects. Numerous medical, psychological and social effects, such as detachment from reality, loss of the social environment, alienation from the family, increase in aggressive behaviours, eye disorders and headaches can be seen, as a result of addiction to digital gaming (see Irmak & Erdogan, 2016). On the other hand, it is also claimed that digital games improve hand-eye coordination, increase players' self-esteem and contribute to educational potential/success (Griffiths, 2002, 47). Parents, on the one hand, don't want their children to spend too much time in this area, but on the other hand do want their children to have 21st century skills, develop talents such as problem-solving, be able to make decisions and collaborate (see Aygul & Eke, 2019). In recent years, educators, game designers and developers, taking these

concerns of parents into account, have looked for ways digital games can be used for educational purposes and have eventually shown that digital educational culture can also be developed by means of gaming.

The subjects of discovering the positive potential of digital games and using it for educational purposes have been discussed in the literature since the early 2000's. For instance, Prensky (2001) states that "digital natives" have more distinctive learning methods than their parents (digital immigrants), the manner of learning has changed and games should be used for educational purposes. According to Prensky, "digital game-based learning" motivates the student by making learning processes shorter and easier. Gee (2003) states that schools, workplaces and families should use games and game technologies to encourage and develop learning. According to Gee, digital games allow children to not only be consumers but also producers. The use of digital games in education and training to meet the needs of the "Net generation", has ensured that this field has in time become recognised as "serious games" (Annetta, 2008, 229-230; Becker, 2008, 49); later, digital educational games (DEG) have been integrated into children's learning experiences and also been labelled as "edu-tainment" (Griffiths, 2002, 47).

There are various games offered by digital educational game creators and developers to the liking of religious parents and children concerning religious beliefs and practices. When it comes to digital educational games, the aim is to improve children's characteristics, such as logic, memory, critical thinking skills, visualization and discovery, as well as to increase their sense of wonder and motivation (Annetta, 2008, 231). Similarly, in the religion-themed digital educational games, it is aimed that children learn religious knowledge and practices by having fun, get to know religious values and are able to transfer this information into their daily life. In this study the most popular four games, "Path of Heaven", "Power of Religion", "Hereafter Quiz" and "Treasure Island", which have been designed for children and are included in Turkish online gaming sites were analysed using Roland Barthes' semiological method. An attempt was made to discuss the religious socialization of children in virtual space through signs which have denotation and connotation meanings in religious-themed digital educational games. Prior to this, is a discussion related to religion and digitalization, as well as information on the religious socialization of children in the digital world.

Digital Religion and Digital Religious Socialization

It is claimed that religious traditions and practices have an unchangeable and strict nature. However, religions have a dynamic structure rather than a static one. Accordingly, religions are constantly changing, transforming, adapting and developing based on the changes in the social world. With the development of the Internet and new media, there have been ongoing transformations in religious beliefs and practices. At the most basic level, the internet has affected religious communities, authorities and identities. Along with this, the new media has also led to changes in the

practice of religious rituals, religious information-seeking behaviors and even the types of religious experiences individuals and groups have (Helland, 2015, 1-2).

The online religious environment is comprised of two equally powerful forces. One of these is the "end-user" and the other is the "content/service provider". There is a unique relationship between these two groups, much like the relationship between religion and the media. The first heuristic classification used to investigate the levels of religious participation through this environment was performed in the early 2000s. The provision of information related to religion on the web explorer and/or its use for information-propaganda is known as religion-online, and the use of the internet as an interactive environment in terms of religious participation is known as online-religion (Young, 2013, 93; Helland, 2015, 3). In other words, religion-online refers to the use of the internet as a communication tool, while online-religion refers to the use of the internet and similar tools to create an interactive environment. Campbell's (2012) definitions of "networked religion", and "digital religion" are also prevalent uses accepted in this context.

As discussed in this study, digital religion is defined as a bridge that connects and expands online religious practices and spaces into offline religious contexts. Accordingly, digital religion means the intertwining of the new and the established or the intersection of both the traits of online culture and traditional religion (Campbell, 2013, 4). Digital religion has many traits, such as learning and talking about religion, discussing religious beliefs and practices, sharing religious feelings and concerns, sending prayer requests, chatting, undertaking religious charitable activities and even participating in online rituals. At the same time, it is also used to handle and discuss online and offline religious participation, the impact of digital networks on religious authority and religious rituals and beliefs which have become different with new media.

Digital gaming and religious interaction correspond to a small part of the digital religious debate. The distant approach of religions to games has prevented the study of games for many years. There are some typical reasons for this; Primarily, games are widely considered simply as a form of entertainment for children and young people; secondly, digital games are often seen as artificial or unvalued forms of expression; a third reason is that technology is seen as a secular field and virtual games worlds are considered to be unreal (Grieve & Campbell, 2014, 53). However, for children and young people who were born in a digital age and socialize in digital culture, the digital game world is an activity/field of activity that takes up a significant part of their daily lives. In this space, children take part in digital culture and become carriers of that culture.

It can be seen that religion is used in various ways within the digital game culture. For instance, religious matters can be used as a background to increase originality in a game or create a special atmosphere. In such a case, the symbols/icons/signs used in the game may have a rarely traceable effect in the game itself or its general narrative. The second way in which to use religion in digital games is the fictionalization of the story/context of a game. In a digital game, characters, environments, images and

stories can be nourished by religious content, or created entirely on top of it. The third way of interaction between religion and digital games is to present certain religious-themed beliefs, doctrines and practices aimed at gamers. In other words, digital games can be used as a tool to present some kind of propaganda or a certain ideology related to religion (Wiemker & Wysocki, 2014, 206-207).

Aside from these three uses of digital game culture produced on religious issues, it is seen that religious-themed digital educational games are produced by game developers with the support of educators, pedagogues, psychologists and experts in the field of religious education. As in other digital games, they involve interacting with the gamer through feedback to achieve a certain aim, ultimately having fun and competing, accessing knowledge and applying the content of religious-themed digital educational games. In this way, parents can both enable their children to learn/reinforce religious knowledge and practices through their playing experience in the virtual space and make the virtual space sterile for their children.

Digital Parentage and Childhood

The transformation of social realities and interactions into a digital form/digitization over data, content and networks, and their transfer to a virtual reality ultimately makes it possible to call the lived period a "digital age/network society". Information and communication technologies connected with internet networks have provided the opportunity for online mobility and social networks. This situation has brought with it a new logic of social relations, a globalized economy and the formation of a virtual cultural structure over time. So much so that in a social plane, with digital culture, the forms of relationships established by individuals and groups change, socialization practices become differentiated and new norms and values are produced (see Castells, 2008; Boyd, 2014; Dijk, 2018; Lupton, 2015).

Discussing the effects of the digitization phase on children is a remarkable issue in this sense. As discussed in this article, one of the effects of digitalization on children is related to the differentiation of family interactions. Being intertwined with a digital world inevitably limits family interactions and transforms or eliminates the quality of togetherness. The reason "digital parents" are as visible as "digital childhood" is that the constant rush of being connected also negatively affects domestic relationships and interactions. As such, it is observed that digital technologies are used to try to meet some parenting roles. Therefore, the socialization processes of children, who have opened their eyes to a digital world, are also different (see Aygul & Eke, 2019).

In the most general sense, media affects the development of the child as a social entity. It spreads its logic and culture by infiltrating its family and narrow environment. Thus, it is included in the child's socialisation process (Berger & Luckman, 2018, 197-198). For this reason, parents intensely demand and use the educational aspects of both traditional/old media and new media. At this point, parents transfer their educational and instructive roles to the media, almost constructing "digital parentage" with their

own hands. Thus, attempts are made to try to compensate for religious education and values that need to be given by the parents with the educational aspect of the media as in other issues.

The basis of individuals' religious beliefs, feelings, attitudes and behaviors develops significantly during childhood. The easy faith/persuasion of children also makes them prepared for religion (Koylu, 2004, 137-138). On top of this, "… religion is the religion that families tell their children." (Mardin, 1992, 64). In the traditional socialization process, the teaching of religion and values was provided by parents to a considerable extent. "Being a parent means taking on the roles of constituent and protector of the world. Undoubtedly, in the most obvious sense, this is by offering the child the environment to socialize and it emerges by acting as a mediator between the whole world of society and the child." (Berger, 2012, 90). However, it is observed that parenting roles have been considerably given up to digital technologies. So much so that digital tools for parents function as an "e-caregiver" where appropriate, and are used for their children to have a good time/ be happy, quiet/to calm down, eat, distract and even sleep. In a way, the interaction between parent-child becomes limited and encounters in the physical space decrease while the boundaries of the interaction between media and children expand and the time spent in the virtual space increases.

As children's time spent in the virtual space increases, parents' concerns about the digital world also increases. Parents - conscious parents - track and control their children's footprints in the digital world through various software programs (filtering, blocking, tracking). In this way, the dangers in the virtual space are minimized and an attempt is made to create a sterile place of use. On the other hand, parents also demand digital educational games to help their children learn while having fun. In this sense, educational games, which are also offered to religious parents, are designed. Thus, children can compensate for their religious socialization while having fun in digital game culture. [*]

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[*] Very little research has been conducted into digital games related to religious education. When analyzing digital/video/computer games, it can be seen that two extents are important. The first is the narrative extent. The story, fiction and themes of the game are at the forefront here. The second is the gamer's role. It covers the possibility of affecting the course of the game and the things experienced during the game (Scholtz, 2005, 176). In recent studies, digital games have been discussed culturally based on three factors: the production of games, game text, and the achievement/acceptance signs of a game. Game designers and developers can produce a game based on specific themes and topics, and retell that theme and topic within the game. Therefore, the researcher's examination of the topics and themes used by game designers and developers in game production will be one of the first steps to understanding and explaining the game. Secondly, it is the determination of the ideas, philosophies and ideologies contained in the content of the game text. Finally, different forms of experiences that gamers have when experiencing games can be analyzed (Wiemker & Wysocki, 2014, 199-203). According to Ferdig (2014, 69-78), who is one of the limited number of people acting/producing in the relevant field, religion and digital games have four basic components: "Game content", which means providing information / instruction / assignment concerning a certain religion or teaching the characteristics of one or more religions that fit the desired characteristics; "game context", which refers to symbols, signs, rules and characters representing religious tones that are explicitly or implicitly found in the game; "game challenge", which has meanings such as taking the role of a god presented in the game, being good or bad, or representing the characteristics of the god of a religion presented in the game; and finally, "personal capital" (gamer's capital), which refers to moral beliefs, the explicit and implicit feedback of others and the religious foundations/knowledge a gamer brings/possesses as an inspector

Studies in Literature

While there is widespread participation in digital culture among children, few studies in this field have analyzed the effects of games and social networking activities on children's spirituality, religious culture and belief (see Scholtz, 2005, 174; Yust, 2014, 134). When this reality is discussed in the context of the Islamic religion and religious games, it can be said that there are even more limited studies. An important part of these studies is related to the representation of the religion of Islam and Muslim identity in digital games. Anti-Islamism (Islamophobia as discussed in the literature) is present in games, either implicitly or explicitly. Fictionalizing Muslims as terrorists/enemies and after all, the otherizing/externalizing of Muslim identities in games inevitably leads to the academia studying this field (see Cingi, 2018; Kalayci & National 2018; Temel, 2019; Yorulmaz, 2018).

The fact that digital game and religion interaction has been discussed since the 2010s has limited the discussions in the literature. On the other hand, there are various studies conducted on the relationship between media and religion in Turkish academia (see Sener, 2019). Some of these studies have been carried out specifically for media and religious education. In her article, "Media and Religion Studies in Religious Education Literature in Turkey" Furat (2019, 32), is said to have carried out 49 studies in this field, in Turkey. According to Furat, when these studies were evaluated in terms of content and extent, three basic areas of questions came to the forefront: Media perception, effect and functionality. Media and religious education were initially addressed with regard to the perception and/or affect of mass media such as television, movies, TV series and cartoon series. Afterwards, with the spread of social media, academia focused on the impact of the internet and social media on the teaching of religion and values. Also, in recent years there have been discussions concerning how traditional and new media can be used in the teaching of religion and values (see Furat, 2015; 2019).

In the related literature, there are a limited number of studies on religious-themed digital educational games. One of these is the master's thesis entitled "Religious Education in Preschool Education Through Computer Games", written by Sevket Mert (2015). The author states that digital educational games with religious content are functional for the religious socialization of preschool children and introduces computer games (memory cards, matching games and puzzle games) prepared for preschool children. The chapter entitled "Religion in Digital Games and the Possibility of Using Digital Games in Religious Education", in the Book by Bilal Yorulmaz (2015) is another of the limited studies in this field. The author in this study discusses religious games, religion in games and the experience of playing games in relation to religion. Each

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independent of the game. Ferdig states that, through these four components, questions such as, "How does religion affect the game?", "How do designers use religious symbols to improve the plausibility of the game?" or "How are religious, moral and ethical principles placed in the general game goals?" can be answered.

issue has been discussed in the current literature and through specimen games. Although it's content is different, Recep Vardi's (2012) article, "Internet User's Habits of the Usage of the Religious Concepts", can also be shown as an example in this regard. Vardi tried to understand adult individuals' knowledge of religious content usage on the internet. He determined that the number of individuals who play religious computer games is low. This situation may be due to computer games with religious content not being very well-known. This study differs from the other three studies in terms of both the way the issue is discussed and its method.

The Purpose of the Study

Religion-themed digital educational games have been chosen as the subject in this study to understand and interpret the interaction between religion and the media and the levels of differentiation resulting from this interaction. The purpose of the study is to reveal the effects and functions of educational digital games with religious themes on children's religious socialization.

This study aims to answer the following questions.

- What are the general features of educational digital games with religious themes?

- What are the contents of educational digital games with religious themes?

- What is the impact of educational digital games with religious themes on children's religious socialization?

Determining the possible effects of religion-themed digital educational games on children's spirituality, religious culture and belief exceeds the limits of the study, but putting forth the effects of the produced content on religious socialization practices is the main aim that this study desires to achieve. Accordingly, religion-themed digital educational games designed/developed for children and produced in Turkey are included in the scope of the study.

Method

Research Design

A qualitative research design has been used to understand and analyze the contents of religion-themed digital educational games developed/designed for children. In qualitative research, the researcher analyzes certain events from various aspects, placing them in the center of the study, making sense of the data which has been obtained, interpreting it and attempting to make it understandable (Neuman, 2014, 237). Accordingly, semiological analysis, which is one of the qualitative research

designs, has been used in the analysis of religion-themed digital educational games designed for children in Turkish online gaming sites.

In the study of Saussure entitled, "Course in General Linguistics", which was first published by his students in 1916, he designed semiotics as a "science to examine the life of signs in society" (Saussure, 1998, 46). According to Barthes (1993, 72), semiotics is used "to determine and reveal the functioning of meaning systems other than language, in accordance with the design of all manner of structural events to create a draft of the observed issues." In semiotic studies, the sign is defined as a whole, arising from a signifier combined with a signified (Saussure, 1998, 111). The signifier represents the concrete direction of the sign. The signified means the design that an object creates in the mind. The signs can be handled in different ways linguistically, visually and symbolically (Barthes, 1993, 40-44). The changes experienced by societies, the diversity of the cultural structure, the position of religion in this structure and the attempt to understand social events ensure that sociology and semiotics studies meet on common ground (Okutan, 2019, 217).

Study Group

There are hundreds of games on Turkish online gaming sites. A small part of these games constitutes digital educational games with religious themes. In accordance with the purpose of the study, "purposeful sampling" was used; this means choosing information-rich situations. For the research problem, within the types of purposive sampling the "typical case sampling" method, which is the selection of the typical/average case from many cases in the universe, was used (Yildirim & Simsek, 2005, 107, 110).

Some of the religion-themed digital games consist of games informing about/aiming to teach the principles and rituals of a religion such as puzzles, matching and quiz. In addition, there are also social impact games aiming to direct the player to take a sensitive stand and develop ethical behaviors by inducing empathy (see Yorulmaz, 2015, 372). The selection of the games, which are the subject of the sample of this study, is based on three criteria. One of these is that the game is designed for children, another is that it is religion-themed and lastly that it has educational content. Ultimately, the idea is to represent the subject matter best among many games, aiming to teach and/or reinforce religious knowledge and practices. The most commonly played four games entitled, "Path of Heaven", "Power of Religion", "Hereafter Quiz" and "Treasure Island" were chosen as the sample of the study.

Limitations of the Study

Since each study is conducted on a certain place/time/issue, it has certain limitations. Including all games in the category of religious games within the scope of this study would make it impossible to look at and holistically evaluate the issue. For this reason, this study is limited to the four games it discusses.

Data Collection

Religion-themed digital educational games produced, sourced and developed/designed for children in Turkey are included in the scope of the study. For this purpose, the Turkish games websites were reviewed and an attempt was made to understand the dynamism on these platforms.

- The games that are considered to have religious themes and which are under the "religious games" tab on certain games websites were investigated.

- The researchers made their decisions by playing/experiencing the games in order to determine whether they were suitable for the subject.

- Alexa Statistics (https://www.domainsorgulama.net/site-analiz/alexa-istatistikleri/) were used to consider the status, number of visitors and number of clicks received by the games websites.

- According to these statistics, the four most commonly played games with religious content were included in the scope of the study and examined and analyzed.

Data Analysis

In this study, a research model for the semiological method of religion-themed digital educational games was designed and at this point, the basic variables in the Roland Barthes' semiological method were utilized. According to this;

- Firstly, the content information of the games and their websites selected were examined.

- Secondly, the formal features of the games were described in terms of graphics and language and were evaluated in the context of the written and presentation codes.

- In Semiotics it is revealed that every sign can have different motifs, symbols, and functions. On that account, thirdly, the sign, signifier and the signified in the games were determined and semiotic analyses of the games were performed. In addition to this, the relationship between the sign, the signifier and the signified are presented in a table.

- To understand the subject in-depth, finally, myths, denotation, and connotation meanings in the games' contents were interpreted by using narrative analyses. Due to Barthes' interest in exploring and interpreting the world, a central position for "meaning" has been given on the basis of Barthes' semiotic approach. According to Barthes, a sign can be evaluated in the context of denotation, and connotation and myths. Denotation occurs by comprehending and explaining the sign directly. The connotation is an interpretation of signs according to special values and functional differences (as cited in Guiraud, 1994, 45). Denotations are more universal and common ideas in people's minds. The connotation is an intellectual

element and more scattered compared to denotation. Myths are a cultural analysis of the connotation (Barthes, 1993, 70).

Findings

In this part of the study, the games, which are the subject of the study, were analyzed semiotically. For this, firstly, information about the game was presented; it was evaluated in terms of graphical language, semiotic analysis and then the narrative analysis of the game was performed.

Game 1: Path of Heaven

- *Game Site and Game Content Information:* This game was selected from the website www.dinioyunlar.net and included in the scope of the study. On the website, some games are mostly preferred by children such as "Iftar Table "I am Learning the Quran", "Religious Knowledge Test", "How to Perform Wudu", "Finding Fard of Prayer". The game "Path of Heaven" received 4.55 points out of 5 from users.

- *Evaluation of the Path of Heaven Game in terms of Graphical Language:* There are visual elements of natural life such as flowers and a lake in the game. The game is fictionalized on a platform using predominantly the color green as the presentation code. As a written code, different questions are asked to individuals. The human figure in the game is on the ground when viewed from above, at the very beginning of the platform. Thus, an apparent image is not initially present. This figure is located next to the flowers and the lake at the end of the game. A piece of wood and hedges are positioned as various obstacles during the game.
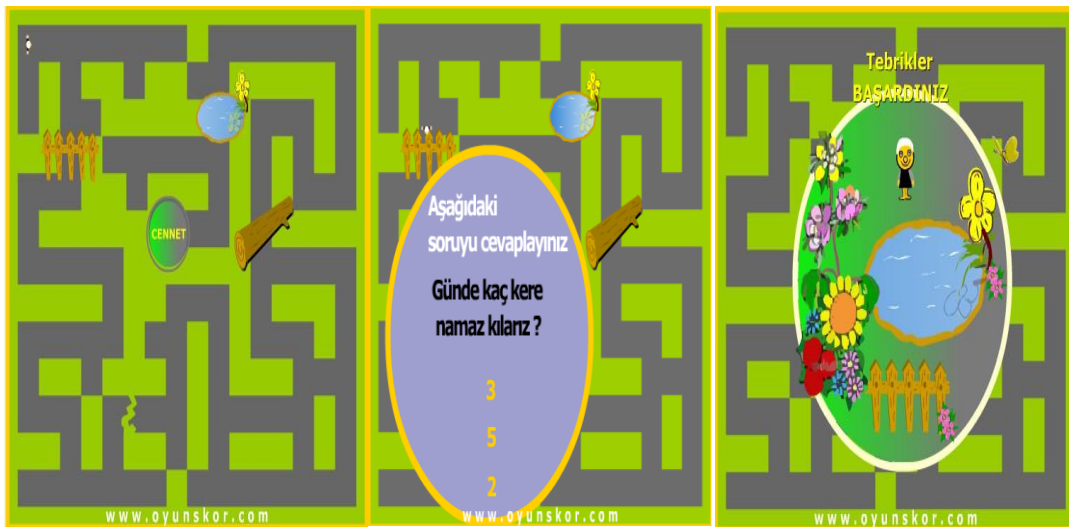
| Image 1.1. | Image 1.2. | Image 1.3. |

- **Semiotic Analysis of the Path of Heaven Game:** The signifier of the location sign in the game consists of flowers and a lake. This part feels like a peaceful place with natural beauty. The signifier of the object sign is the piece of wood and the hedges. It represents challenges and obstacles to overcome. The signifier of the writing sign is the competition questions, "Heaven" and "Congratulations You have done it". This represents the measurement of religious knowledge and the goal which has been reached. The signifier of the human sign is a man. It is seen that he has clothes which are appropriate to the Muslim identity. The smile on his face gives the impression of happiness.

Table 1.1.

Semiotic Analysis of the Path of Heaven Game

The Type of Sign	Sign	Signifier	Signified
Iconic	Location	Flowers and a lake	Peaceful place
Iconic	Object	Hedges and piece of wood	Obstacles
Iconic	Writing	Heaven	Goal
Iconic	Writing	Religious questions	Measuring religious knowledge
Iconic	Writing	Congratulations, You have done it	Achievement
Iconic	Human	Human figure	Muslim gamer

- **The Narrative Analysis of the Path of Heaven Game**

  - **Denotation Meaning:** The game is a maze game, in which the first human figure is expected to overcome various obstacles in turn. When the gamer comes to obstacles, he encounters questions with religious content. If he answers these questions correctly the obstacles disappear. The gamer who has overcome all the obstacles reaches heaven.

  - **Connotation Meaning:** The game aims to teach basic Islamic knowledge and practices such as prayer, fasting and giving "zakat" to the gamer. The use of the color green as a presentation code signifies more peace, calmness and happiness. Reaching heaven can be associated with the meanings of the color green, because green is depicted as the basic color of sanctuary and spaces in Islam (Mazlum, 2015, 134). Koc (2008), in his study based on the 7-15 age group, made children draw pictures of heaven and hell and evaluated these pictures using the method of semiotics. It was determined that the children who drew heaven predominantly used the color green and associated paradise with the elements of nature. Children can design abstract concepts with different fictions, motifs and models in their minds. The depiction of heaven seen at the end of the game can help the child provide an idea of the supernatural world with descriptions in the imaginary world. At the end of the game, an expression of happiness appears on the face of the gamer figure who has reached heaven.

The message given here is that individuals will be satisfied and find peace if they perform their religious worship and practices. Apart from this, the clothes of the human figure in the game are designed in accordance with Muslim attire. In childhood, games can be utilized to teach religious knowledge, words and concepts. Using religious and moral motifs and indicating spiritual values in games can affect the child's mental descriptions related to religion (Simsek, 2004, 216). The game both aims to teach the gamer basic religious knowledge and refresh existing knowledge with religious questions, and to mentally describe the concept of heaven in the holy books.

- **The Myth** Reaching heaven is a demanding process.

Game 2: Hereafter Quiz

- **Game Site and Game Content Information**: This game was selected from the website www.oyunyelpazesi.net and included in the scope of the study. There are many religious games in the "religious games" category of the site. There are games such as "Perform Wudu", "Arabic Letters", "Complete Hadith", "Perform Prayer", "Find the Names of the Companions", "Learn Prayer and Rosary" and "Find the Kiblah", which aim to teach religious knowledge and practices. In addition to games, there are religious puzzles, coloring and memory games. The game "Hereafter Quiz" received 3.9 points out of 5 from users.

- **Evaluation of the Hereafter Quiz Game in terms of Graphical Language:** Written code was used predominantly in the game. As a presentation code, various shades of the color blue are placed in the background. There is a white character in the right corner of the platform and a red character in the left corner. At the same time, there are images of mosques and minarets in the middle of the playground. However, it is seen that these images are not very obvious.

Image 2.1   Image 2.2

- **Semiotic Analysis of the Hereafter Quiz Game:** The signifier of the location sign in the game consists of a mosque and minarets. This symbolizes the places of worship of the Islamic religion. The signifier of the object sign is the trident. This represents a symbol belonging to the devil. The signifiers of the writing sign are the

competition questions. The aim is to measure religious knowledge. The signifiers of the character sign are the red and white figures. They are thought to represent the devil and the angel.

Table 2.1.

Semiotic Analysis of the Hereafter Quiz

The Type of Sign	Sign	Signifier	Signified
Iconic	Location	Mosque and minarets	Places of worship
Iconic	Object	Trident	Devil's pitchfork
Iconic	Writing	Religious questions	Measuring religious knowledge
Iconic	Character	Red figure	Devil

- ***The Narrative Analysis of the Hereafter Quiz Game:***

  - ***Denotation Meaning:*** The game is a quiz with questions that address different aspects of religion. The gamer is expected to give the correct answer by asking various questions. In this way, the aim is to measure the level of religious knowledge of individuals. At the end of the game, the following feedback is given according to the number of correct answers obtained: "Your religion knowledge is very bad, you need to solve more questions and improve.", "You are God's beloved servant, but work a little more.", "May God grant all servants to be like you, you are Heavenly."

  - ***Connotation Meaning:*** In the left corner of the game, there is a red devil figure holding a three-toothed spear at its long handle. It is stated in the holy books that the devil was created from fire. Therefore, it can be said that the devil is depicted using the color red in the game. On the right, a white angel figure with wings is depicted. It is believed that the color white symbolizes purity. At the same time, it is stated in the Quran (Surah Kâf, 16-17, 18; İnfitâr, 10-11; Zuhruf, 80) angels observing people and recording their actions, do exist (https://kuran.diyanet.gov.tr/tefsir). Based on this information, which is supported by folklore, it is seen that the devil figure is placed on the left side and the angel figure is placed on the right. Content such as pictures, posters and photographs designed for children can be used as an active tool to reveal their thoughts and mental world (Koc, 2008, 262). In the games, as an intangible value, religion can be presented to children in tangible visual terms and can be seen as mechanisms that support intrinsic and extrinsic motivations.

  - Feedback is given to the gamer in the game according to the success achieved. In this way, the message is given to the gamer that religious teachings should be known, effort should be made and that to reach heaven, strong devotion to religion and being a good servant needs to be realized through religion. A questioning and curious personality of the child, in addition to rapid access to all kinds of information in the digital age, can accelerate the process of learning

religious representations. Hence, in games with religious content, a gamer character can make contact with religion.

- In the knowledge competition titled "Who Wants To Be A Millionaire", which has different versions on the television and internet, the contestant is given both "50:50" joker and "ask the audience" joker rights to make it easier to get the correct answer. In the Hereafter Quiz contest, the "half-half" joker right has been changed to "ask for intercession" and "ask the audience" joker right has been converted to "ask the congregation". The transfer of the joker rights used in the game to the gamer by using religious expressions is an indication that religion protects its language to a certain extent while meeting the digital platform and that religious sensitivities are observed while adapting the game to the platform. Thus, these games can function as a sterile entertainment environment for parents who want their children to learn religious knowledge and practices from digital media. On the other hand, a liking culture that takes into account religious sensitivities could be built in the digital world for both parents and children.

- *The Myth* It is important to know religious information.

Game 3: Power of Religion

- *Game Site and Game Content Information:* This game was selected from the website www.dostoyun.com and included in the scope of the study. Compared to the above two websites, games with religious content are very limited on this site. In addition to the game discussed, there are also games such as "Learning My Religion", "Religious Question Competition" and "Religious Treasure Island". The game "Power of Religion" received 3.68 points out of 5 from users.

- *Evaluation of the Power of Religion Game in terms of Graphical Language:* In the background of the game, houses, mosques and minarets are depicted predominantly in grey color as the presentation code. In this way, this represents worldly life. The sky is depicted with the color yellow, reflecting the sunlight. The meaning of the colors, the way they are used, the psychological effects and perception styles can differ according to the cultural values in society (Bodur, 2006, 83). The game takes place on a bridge over the sea. On the bridge is the image of a flying monster with a grey body, red eyes and sharp teeth. There is a human figure directly opposite it waiting with a canister in hand. These two figures are positioned mutually on the bridge. Different words with religious content are used as the written code.

Image 3.1.   Image 3.2.
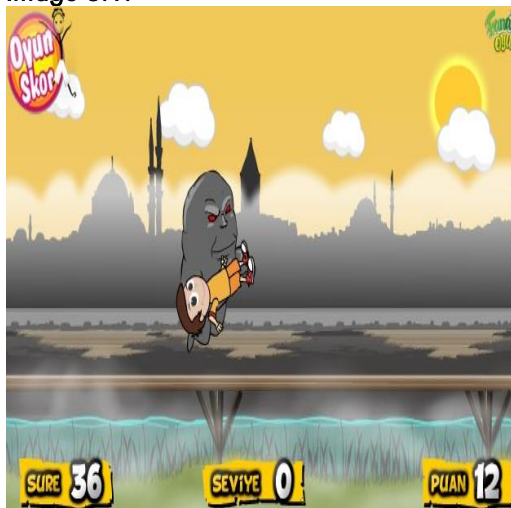
Image 3.3.   Image 3.4.

- **Semiotic Analysis of the Power of Religion Game**: In the game location signs are predominantly used. The houses symbolise the life of the city; the mosques and minarets, symbolise the places of worship in the city; the water in the sea, the sky, the clouds and the sun symbolise the natural elements of the atmosphere and represent the signifiers. The signifiers of the object sign are materials such as bridges and bottles. The bridge symbolizes the mutual challenge, and the materials symbolise the tools of the challenge. The signifiers of the writing sign are religious words. The aim is to teach religious content. The signifier of the character sign is the monster figure. It is thought to evoke the devil in terms of its formal features. The signifier of the human sign is a man. It is seen that he is ready to challenge with the materials he has.

Table 3.1.

Semiotic Analysis of the Power of Religion

The Type of Sign	Sign	Signifier	Signified
Iconic	Location	Houses	Worldly life
Iconic	Location	Mosque and minarets	Places of worship in the city
Iconic	Location	Water	Sea
Iconic	Location	Sky, clouds, sun	Atmosphere
Iconic	Object	Bridge	Come across
Iconic	Object	Materials such as bottles	Challenge tools
Iconic	Writing	Religious words	Measuring religious knowledge
Iconic	Character	Monster figure	Devil
Iconic	Human	Human figure	Muslim gamer

- **The Narrative Analysis of the Power of Religion Game**

  - *Denotation Meaning:* By showing various religious words in the game, the gamer is expected to write these words correctly. If the religious word is written correctly, the human figure throws the materials in his hand at the monster. Thus, the aim is for the monster to fall into the sea. The gamer who writes religious words completely and correctly wins the game. Any incorrect spelling of each letter of the words causes the monster figure to approach the human figure. If the entire religious word is written incorrectly, the monster figure captures and kills the human figure.

  - *Connotation Meaning:* With reference to the religious knowledge that the devil was created from fire, in this game it is thought that the monster figure represents the devil due to its red eyes. The positioning of the human figure right across the devil represents the existence of a field of challenge. The city in the background of the game symbolizes worldly life and refers to the field of challenge of the devil and the human. The bridge in the game symbolizes the "Sirat Bridge". Signs such as the Sirat bridge, the devil, the colors red and black can create depictions about the punishment of evil and hell, in children's minds (Koc, 2008, 282).

  - Presenting the words to measure religious knowledge to the gamer and defeating the devil with the correct spelling of each word, in terms of the game challenge, it both shows the importance of religious knowledge and ensures that it is reinforced. The misspelled letters mean the inadequacy of religious knowledge. The message in the game is that religious knowledge and practices will help individuals to challenge the devil/desires in worldly life and that otherwise, s/he will succumb and will pay a price for it.

  - Religious content games on digital platforms can contain different depictions of gods, religious symbols and figures according to their themes and can discuss the challenge between good and evil forces. The gamer believes that if s/he plays the game well, s/he can achieve success against evil forces. Thus,

religious doctrines are thought to be an effective factor in providing justice (Scholtz, 2005, 173-180).

- The child's internalization of religious feelings may differ depending on the phraseology used in teaching religious knowledge. Children experiencing fear-based learning process may not be able to demonstrate good religious development (Oruc, 2010, 81). In the game, the monster figure catches and destroys the human figure, spilling blood. This may cause a negative psychological effect on the child. For this reason, while introducing basic notions of religion, especially in early childhood, the child's way of evaluating the events in the world of feelings and thoughts may differ.

- According to the meanings of the game, religion can affect the actions of individuals. If the individual shapes their behavior with the rules of his/her religion, s/he can survive in social life. At the same time, it can be said that religion is a control mechanism in social life and emphasis is placed on its disciplinary aspect.

- ***The Myth:*** It is necessary to struggle with the devil.

Game 4: Treasure Island

- *Game Site and Game Content Information*: This game was selected from the website www.kraloyun.com and included in the scope of the study. Although the site has many types of games, those with religious content are very limited. In addition to the game discussed, there are also games such as "Religious History Wheel", "Religious Knowledge Competition", "Islamic Knowledge Competition", "Breaking and Not Breaking The Wudu Spell" and "Ramadan Puzzle". The game "Treasure Island" received 4.2 points out of 5 from users.

- *Evaluation of the Treasure Island Game in terms of Graphical Language:* The game is fictionalized on a platform consisting of the elements of natural life. As the presentation code, the sky and the sea are blue, the trees are green, and the mountains are brown. The game takes place on an island. Therefore, the sea and the color blue were used more predominantly. The figures of three children – two boys and a girl are positioned at the beginning of the island. Various questions are asked of the gamer as the written code. At the same time, animals are also clearly seen. Gamers play an active role during the game, both by answering the questions posed and passing from one obstacle to another. At the end of the island, there is a treasure chest that can be reached if the game is won.

Image 4.1.   *Image 4.2.*

- *Semiotic Analysis of the Treasure Island Game*: In the game, the signifiers of the location sign are mountains and islets, height, distance and the places to be overcome; the forests full of trees, the water in the sea, the sky and the clouds represent the natural elements of the atmosphere. The signifiers of the animal signs are the turtle, rabbit, mouse, bird and frog. During the game, the turtle directs the gamer by carrying him/her on its back, the bird by helping the gamer to fly and the frog by assisting the gamer to jump. The signifier of the object sign is the treasure chest. It symbolises reaching the target and winning. The signifier of the writing sign consists of competition questions. The aim is to measure religious knowledge. The

signifiers of the human sign are the two boys and the girl. It is seen that the clothes of the girl figure are designed in accordance with the Muslim identity.

Table 4.1.

Semiotic Analysis of the Treasure Island

The Type of Sign	Sign	Signifier	Signified
Iconic	Location	Mountain and islets	Living place
Iconic	Location	Trees	Forest
Iconic	Location	Water	Sea
Iconic	Location	Sky, clouds	Atmosphere
Iconic	Animal	Turtle, rabbit, mouse, bird, frog	Animals that ask questions
Iconic	Object	Treasure chest	Award
Iconic	Writing	Religious questions	Measuring religious knowledge
Iconic	Human	Girl	Muslim gamer
Iconic	Human	Two boys	Muslim gamer

- **The Narrative Analysis of the Treasure Island Game:**

  - **Denotation Meaning:** There are various obstacles from the beginning of the island. In the game, animal figures are waiting in certain parts of the island and they ask the human figures questions about the Quran. If these questions are answered correctly, the obstacles are overcome and the treasure chest is reached.

  - **Connotation Meaning:** The game is an educational game that is aimed at teaching all kinds of knowledge about the Quran. It is seen that the clothes of the girl figure in the game are designed according to the Muslim identity. Children have the ability to imitate everything they see from their environment, parents and peer groups in the learning process of early childhood. At this point, they may feel a desire to be curious and experience religious signs in games. Games are seen as the signature of childhood. They are vivid and visible manifestations of imagination and learning. Games and rituals are thought to be effective in religious development. That is because rituals can shape human consciousness and behaviors through games (Bellah, 2011, 89).

  - Each animal asks three questions, and if the questions are answered correctly the animals carry the children to the next obstacle. If the wrong answers are given to the questions the game starts again from the beginning. Thus, the aim is to ensure/reinforce religious information permanently. At the end of the game if all questions have been answered correctly the treasure at the end of the island is reached, and there are various hadiths about the importance of learning the Quran. Religion can promise to satisfy certain aspirations and desires of individuals, and offer alternatives (Scholtz, 2005, 179). The treasure reached at the end of the game ensures that the gamer is symbolically satisfied and religious teachings are used while doing this.

- ***The Myth:*** Living as necessitated by religion is the gift/treasure of life.

Conclusion and Discussion

The ongoing discussions in the literature on the possible effects of digitalization on religion and religiosity demonstrate that Muslims have an intense desire for information and communication technologies and in addition, can exhibit their own identities in a virtual space with the opportunity for online movement provided by the internet, being able to take part in a digital religious culture. Nevertheless, the digitalization of religion inevitably serves the culture industry, consumer society, culture and ideology, so the content produced can be detached from its context (Haberli, 2014, 163; Kararaslan, 2015, 40; Menekse, 2015, 158; Akgul, 2017, 203; Haberli, 2019, 311-312).

The scope and speed of information and communication technologies have spread through all areas of the social sphere. Religion is one of the social institutions that has entered the digital environment. This environment has been under the influence of capitalism and the consumer society, culture and ideology created by capitalism. Consequently, as well as the transfer of religious objects, symbols, and signs into digital worlds, virtual environments are designed for the consumer to have fun and obtain religious knowledge and practices. From the standpoint of Islam, the door to a world which is considered as being non-sterile has opened slightly and Muslims are also endeavoring to discover the limits of this "fascinating" environment. The presentation of religious knowledge and practices in the form of entertainment and competitions through digital games is one of the new aspects of "digitalized religion".

When the general features of the religion-themed digital educational games are analyzed, it is seen that colors, visuals, symbols and clothes that reflect the religion of Islam and Muslim identity are used. The visuals and symbols in the games make it possible to present intangible values such as heaven, hell, the devil and angels to children through tangible visuals. Using religious and moral motifs in the games both affects the child's spirituality, religious culture and belief, and can also affect the child's mental descriptions concerning religion.

When the contents produced in the religious-themed digital educational games are analyzed it is seen that basic Islamic knowledge and rituals/practices are presented. In addition to this, there are also social impact games that emphasize the appearance/importance of religion in social life, and the individual taking a sensitive stance and developing ethical behaviors by inducing empathy. Employing the game, the aim is for children to learn/reinforce their knowledge and practices of the Islamic religion, while at the same time having fun, as well as learning religious and moral values, ensuring religious participation in a virtual space and transferring this knowledge/rituals/worship to their daily lives. The inquisitive and curious nature of the child is taken into account in reinforcing religious knowledge and practices. In addition, the gamer's act of playing the game is supported by feedback and awards. Thus, the

motivation of the gamer is to overcome certain obstacles/know the answers to the questions and, ultimately, increase the awards they obtain. The examples of challenge between good and evil forces and the myths in the games give the impression to the child that this is a long and difficult process. Moreover, this demonstrates that a fear-based learning process is used in games.

When the effects of religious-themed digital educational games on the religious socialization process of children are analyzed, it is seen that a new socialization practice is being established. "We usually earn and internalize our religion from other people, especially people with whom we are personally close or whom we have a sense of commitment to through strong ties." (Zuckerman, 2006, 91). However, for children born and growing up in a digital age, religious socialization occurs in a virtual space, as in other socialization practices. In particular, leaving the parenting roles to digital technologies can lead to children spending more time in online environments/spaces, and the internet environment and tools, which are a secondary socialization tool, and can thus turn into a primary socialization agent. The religious-themed digital educational games discussed are functional in the religious socialization of children in terms of both their general features and content.

Children are the most affected and most vulnerable from content produced in the digital media. Therefore, it is important to investigate how childhood is designed with digital games and how children are positioned (Alver, 2004, 140) and to what extent digital educational games have effected children's religious knowledge and spirituality. Like traditional games, educational digital games seep into the socialization processes of children and ensure the learning of various pieces of knowledge and practices, through repetition and internalization through the game experience. At this point, it is understood that digital educational games with religious themes are also a form of religious socialization. When considered as a new socialization practice, this process can be called "digital religious socialization". This study reveals that these games are functional for children to ensure they learn and reinforce religious knowledge and practices. However, it also suggests that these games have some negative effects (such as violent images) pedagogically. Therefore, the content, signs, symbols and characters should be designed by obtaining the opinions of the relevant experts. Presenting educational games in entertainment formats may lead children to spend long hours playing games and ultimately lead to digital addiction. For this reason, it seems that it is important for parents to check whether digital educational games are sterile or not (tracking digital footprints) and allow children to use them only for limited periods.

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Experiences of the Mothers to Cope with the Problem Behaviors of the Children with Special Needs during Coronavirus (COVID-19) Process

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Abstract: Babies are born into different families, cultures, environments; their first interaction environment is the family. This study investigates the opinions of the mothers who have children with special needs based on the experiences to cope with the children's problem behaviors in the Coronavirus pandemic process. This study was designed in the qualitative research method. Eleven mothers whose children continue to special education rehabilitation centers in a provincial center in the Southeastern Anatolia Region constitute the participant group of the study.The data obtained using the semi-structured interviews were analyzed with the content analysis method; the findings were described under eight main themes. While observing that the mothers were responsible for in-house communication during the staying home process, their feelings were loneliness, not usually receiving support from partners and relatives. Mothers stated that their children showed self-harm, aggressiveness, and nonrestraint; suggested that the special education institutions' managers and teachers' professional competiencies should be strengthened regarding distance education process; family-based effective intervention programs should be developed.

Keywords: Coronavirus (COVID-19), parent-child interaction, positive behavior support, problem behavior, child with special needs

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Introduction

Babies are born in different families, cultures, and environments. Their development is affected by the environment in which they grow up as well as genetic factors. However, the development process is mainly shaped in accordance with environmental factors (Aydin, 2014, pp. 3-15 Senemoglu, 2005, pp.1-15). The first environment of interaction for the child is the family environment. In a sense, the first source in which happiness is felt, to love, to be loved, and other social-emotional satisfactions are experienced is the family in the first years of life. However, the family is also the first place to experience and feel the conflicts, fights, and emotional stress. In this regard, the children get the most harm as a result of the negative experiences that resulted from the interaction between the family members or external factors (Skinner et al., 2006). Thus, emotional conflicts, verbal and physical violence in the family lead to interparental conflict; mostly cause negative behaviors in children. Children experience the social environment for the first time after the family environment. They have a different experience with the adults, their teachers, and peers independently of their parents when they start school life. The children are expected to interact with the people in their environment in both academic and social sense (Taner-Derman & Basal, 2013). In this regard, it is possible to observe positive relationships in the school experiences of the children who experience a healthy communication process in the family environment. However, children may sometimes show a behavior not accepted by the norm for different reasons. These behaviors may cause various problems both in the house and the classrooms. These behaviors which are stated as unacceptable behavior in the literature are called "Problem Behavior" (PB). Problem behavior is defined by Carr and Durand (1985) as behavior that prevents people from taking part effectively in society and can harm both themselves and the people around them, and they make social participation difficult for individuals because they can cause injury and are dangerous (Dunlap, Johnson & Robbins,1990). Erbas (2002) drew attention to the reasons, process, and results of the behavior; described PB as children's having difficulty in following the instructions given by the educator in the classroom, having problems in forming positive communication and interaction with the peers, teachers, family, relatives, and neighbors, harming their peers or themselves. Starting from these definitions, what is experienced before and after the problem behavior should be examined as well as why, how, and with whom it may occur. For example, when behavior is examined concerning the place and time it occurs, behaviors of being sad, combative, aggressive, and violative in the classroom or a social environment are not accepted by society. Thus, these behaviors are behaviors that may prevent learning for the individual and their environment, affect the interaction with their peers negatively, and harm them when they occur in the classroom (Erbas, 2002). They may also affect learning negatively. Yucesoy-Ozkan (2016) stated that these behaviors hinder themselves and their peers from learning and that they may cause a negative effect on social interaction and harm the individual and his/her environment. In brief, three main factors are critical in determining if a behavior is PD; learning, social interaction, and security. Thus, it is suggested to assess if a behavior has factors that threaten the

individual or his/her environment. It is necessary to observe and thoroughly examine what happens before, during, and after the behavior to assess the behavior. Because it is necessary to have information about how many times and how often it lasts to define behavior as a problem. Thus, these behaviors are behaviors that have gained continuity, making social participation difficult (Carr & Durand, 1985; Dunlap, Johnson & Robbins, 1990; Erbas, 2002; Erbas, 2005; Erbas, Kircaali-Iftar & Tekin-Iftar, 2007, pp.7-15). In this regard, the most important aspect of observation results and assessment data is that the factors causing the problem are known and they allow practices that reduce or prevent its occurrence (Erbas, 2002; Erbas, 2005; Erbas, Kircaali-Iftar & Tekin-Iftar, 2007, pp.7-15). Another important subject is that it is not appropriate to directly label some behaviors of the children as PB. It is necessary to determine whether the behavior shown is observed in their peers and the stimulus before and after this behavior occurs. Thus, it is not enough for a behavior to be described as a problem by one person. For example, while a teacher defines finger tapping on the desk as a problem, another teacher may not see it as a problem. Thus, it is necessary to determine whether a behavior is a real problem in the scope of PB definition (Erbas, Kircaali-Iftar & Tekin-Iftar, 2007). It is suggested to make a detailed examination of the reasons for the behavior primarily to define it as a problem behavior. Because this behavior should be reduced or eliminated by preventive and effective interventions in the following process if the behavior is really a PB.

It has been stated in the literature that there are different reasons for the children to show PB. In other words, the children aim to reach an aim or target by showing these behaviors (Crone & Horner, 2003, pp. 29-35). While attention seeking, achievement and avoidance behaviors can be among the reasons, self-reasons, home environment-based reasons, in-school and classroom reasons, environmental events, reasons for harming their environment and themselves also lead to these behaviors (Kanlikilicer, 2005; Yucesoy-Ozkan, 2016). Besides determining the reasons for this behavior, it is necessary to assess the behavior concerning appropriateness to the age of children, intensity, duration, and gender roles (Erbas, Kircaali-Iftar & Tekin-Iftar, 2007; Kanlikilicer, 2005; Koska, 2019). Because the PBs shown by the children can tend to last a lifetime if no intervention is made. Thus, it has been suggested to investigate the reasons by examining whether a behavior is a problem; lastly to develop intervention plans particular to the behavior (Erbas, 2002; Erbas, Kircaali-Iftar & Tekin-Iftar, 2007). When examining the reasons for PB, definitions related to the disability area of the child, parental roles, and negative experiences can be seen. In this regard, functional assessment is a highly effective definition. The process of collecting information and deciding about the stimuli, premises, and results emerged before the occurrence or non-occurrence of problem behavior, which is determined by taking the information stated in the personal file of the children into account and using the interviews conducted with his/her environment, is referred as *functional assessment* (Erbas, 2005). According to the functional assessment viewpoint, it is thought that not all the behaviors shown by the children are problems and these behaviors do not occur in accordance with the disability of the child; there can be a situation or event that triggers the behavior (Erbas, Kircaali-Iftar & Tekin-Iftar, 2007). Functional assessments

provide a base for effective plan preparation and implementation of the plan. In this sense, functional assessments serve for preparing plans to cope with the PBs that continue despite the precautions taken by teachers at school and parents at home and determine what kind of reaction will be given to which behavior at what time (Guner Yildiz & Kurtova, 2017). It has been suggested to use proof-based behavior change techniques to prevent or reduce the increase in the severity of the problem behavior in time and the negative effects of these behaviors both to the daily life and educational life of the children. It is necessary to prepare behavior change/new behavior-building plans, including proof-based techniques for these existing behaviors and to apply these intervention plans (Erbas, 2002). Consequently, to cope with the problem behavior of the child in both home and school environment, it is necessary to a) form positive environments, b) prepare positive behavior support approaches-based and proof-based programs, c) form and cooperate with a team for fighting with PBs, d) prepare and implement assessment process, including all students, e) cooperate with the family, f) search and find the source and reasons of the PB, g) prepare intervention programs for the problem behaviors at home/school (Erbas, 2002; Sprague & Horner, 2007; Horner, Sugai & Anderson, 2010; Piskin, Ogulmus & Boysan, 2011). The purpose of the action plans prepared is to decrease the problem behaviors, increase the appropriate behaviors, and the children's life quality. These practices serve for the increase in the social acceptability of the child. The positive behavior support approach (PBS) is a proof-based program that is implemented to decrease the problem behavior (Erbas, Kircaali-Iftar & Tekin-Iftar, 2007; Yucesoy-Ozkan, 2016).

Role of the Family and Teachers in the Positive Behavior Support (PBS) Process

PBS is a multi-component set of proof-based strategies used to increase the life quality of the children. It decreases the occurrence, severity, or effects of the problem behavior (Government Association, 2014; Positive Behavioral Interventions and Supports, 2018). It is an approach that adopts the principles of Applied Behavior Analysis (ABA), aims to decrease the inappropriate behaviors and increase the appropriate behaviors (Erbas, 2005). ODD is based on four main characteristics. These are making regulations and interventions regarding the problem behaviors/the behaviors to be increased using *proof-based practices*, using *multi-intervention methods* instead of standardized intervention for the individual, being important and necessary for the individual *based on individual's life*, and lastly being *sustainable* (Dunlap, Sailor, Horner & Sugai, 2009). Including the family and the teachers in applying these components supports the balance between home and school life. In a sense, the behavior change techniques applied at home and school support the classroom and home environment and social participation by taking the individual's critical period into account. While school and classroom-based practices are prominent in coping with PB in educational environments, parents at home take over the teachers' role at school.

The intervention to the problem behaviors that emerge at early ages at home is highly significant given that the early childhood period is the most important step in the life

circle and it is necessary to cope with the problem behaviors in this period and even prevent the occurrence of the situation and events that trigger the behavior. This period is critical because it constitutes the main age range for all areas of development and the problem behaviors shown in early childhood may have higher effects on the child and other individuals in the following developmental period. Hence, following the behaviors in the early childhood period well, observing and preventing the child's problem behavior provides a base for the language development, mental development, and social-emotional development areas. For example, the children who have a problem in the social-emotional development step have difficulty in healthy communication with the individuals in their environment; they cannot express themselves can cause negative behaviors. Individualized intervention programs are implemented to support the children's social-emotional development, decrease the PBs, and improve appropriate skills. This intervention program is referred to as the pyramid model in the literature. This model consists of three stages for preventing problem behaviors in the early period: primary, secondary, and tertiary prevention stages. The steps have included in the PBS programs are implemented in these stages. While the primary prevention includes the precautions that can be taken by observing the PBs before they emerge; the secondary prevention includes the intervention program for the behaviors of the children who did not respond to the primary prevention and are considered to be at risk. Tertiary prevention includes intensive and individual intervention programs regarding the problem behaviors of the children who did not respond to the primary and secondary preventions. This model aims to obtain positive results by focusing on the negative behavior, to focus on decreasing PBs, and supporting positive social-emotional development (Hemmeter, Fox & Hardy, 2016; Tomris, 2012). In this process, parents with whom they stay together most and experts (such as preschool teachers) who work in early childhood have a great responsibility (Hemmeter, Fox & Hardy, 2016). The parents' most important contribution to the PBS process is that they collect thorough information by assessing their children in different environments at different times. Thus, the parents are the key elements of an appropriate intervention program in the PBS process. PBS-based interventions can be implemented throughout the school to decrease and prevent PBs in the school age. School-based practices are a system approach that provides the necessary social, behavioral, and cultural support for the children to gain social and academic success at school. When examining the literature, studies, including problem behavior management and positive behavior support regarding the teachers and families draw attention (Celik, 2012; Ozbey, 2010; Ozbey, 2012; Ozen, Colak & Acar, 2002; Toret et al, 2014; Tomris, 2012). In a study conducted by Celik (2012), it was stated that the problem behaviors of the children decreased in the home environment as a result of the family-based program implemented; a study by Tomris (2012) shown that the families make explanations to the children or punish the children after the problem behavior. Ozbey (2010) drew attention that the inter-family communication shapes the problem behaviors seen in the children and the attitudes of the family are significant. Ozen, Colak and Acar (2002) concluded that mothers have learning needs about how to deal with the problem behaviors. Toret et al. (2014) found out that the PBs affect the lives of the children; Ozbey (2012) found out that the parents think the PBs increase to

gain attention in the home environment. Another factor that is as important as cooperation for implementing the PBS process at home and school is how to apply and plan positive behavior support in the changes in experiences due to sudden situations. For example, families of many children with or without special needs (SN) had difficulty managing the process at home during the Coronavirus (COVID-19) process, which emerged as a global pandemic. The families stated that they have difficulty in coping with the PB and they need support about how they should behave (Yildirim, Karahan, Demiroz, Sener & Ozaydin, 2020). In this sense, it is important to examine the parent's processes to cope with the PBs of the children at home and determine their support needs. Because COVID-19 led to decisions regarding the education, health practices, and social life in our country like all the world, the education of the children with and without special needs was supported at the home environment through distance education. Continuing the education in the home environment revealed the need for cooperation of the families with the teachers and experts about how to apply effective interventions in the process. As the pandemic has started a new process, it has been thought that studies about the experiences of the parents about how to cope with the problem behaviors of the children at home are needed and this study was planned. In this study, the communication types that families establish with their children during this long process that they spend at home, and most importantly, experimental experiments aimed at overlapping the areas they need and take support can be considered as a distinctive aspect. The fact that the PBs of the children with special needs were determined according to their own opinions based on their lives specific to the coronavirus period is also considered a distinctive aspect of this study. Besides, because the home support needs of the children in different need groups were examined and the opinions of the mothers who spend the most time with the children with special needs were taken is other prominent characteristics of this study. The findings based on the opinions of the mothers who participated in this study can contribute to supporting the education services in the scope of distance education. Besides, it can contribute to a healthier transition period based on institution and home resulted from the fact that the private special education centers started service on July 15th, 2020. Consequently, a need for examining the COVID-19 experiences of the mothers who have children with special needs arose; accordingly, this study investigates the experiences of the mothers who have children with special needs to cope with the problem behaviors during COVID-19. For this purpose, the answers to the questions below have been sought:

During COVID-19, what do the mothers who have children with special needs (SN);

1. What do you think about the changes in household routines?

2. Observe the interaction between the children with special education needs and other children. What do you see?

3. What do you think about the changes in the behaviors in the children with special education needs?

4. What is your experience in the process of coping with the problem behaviors of the children?

5. What do you think and suggest as the support areas they need and the regulations to be made in this regard?

Method

This part includes information about the study design, participants, researchers, data collection tool, data collection, and analysis.

Study Design

In this study, the data was obtained using the semi-structured interview and the qualitative research design was used. The semi-structured interview technique was used to provide flexibility to the mothers for the answers they gave during the interview. In this sense, individual interviews were conducted with the mothers.

Participants

The purposive sampling method was preferred in determining the participant group of this study (Miles & Huberman, 1994, p. 28). The purpose of preferring the purposive sampling method is to reach information about the experiences of the mothers who have children with special needs in the coronavirus period. Patton (2001, p. 238) emphasized that the participants of the study are determined in accordance with some predetermined criteria in the criterion sampling method. Thus, the participant group of this study in which criteria sampling based on purposive sampling was used consisted of 11 mothers whose children continued to special education centers affiliated to the Metropolitan Municipality of a province in South-eastern Anatolia Region and private special education and rehabilitation centers in the same city center. The criteria determined for the participation in this study were: Being the parent of a child with special needs, having reported the need for support to cope with the problem behaviors of the children to the principal or teachers of the institution that the children continued face-to-face education before the coronavirus pandemic, having accepted to participate in the study on a volunteer basis. First, the principals of the institutions were talked to via phone and online, the purpose of the study was explained and the permissions were taken (verbal-with voice record). Telephone interviews were conducted with the mothers who were contacted through principals of the institutions, the purpose and the ethical rules (such as introducing the research group, confidentiality of the information, not using the data except for scientific purpose, introducing the consent forms, and recording the interviews with voice recorder based on a voluntary basis) were explained. They were informed that there were no right or wrong answerst to the questons to be asked, their opinions and approvals of volunteer

participation were obtained, and it was stated that they had the right to withdraw from this study at any stage they wanted. The reason for preferring voice recording and online interviews in determining the participants and conducting the inverviews is that the coronavirus pandemic process and accordingly, the lockdowns continue. Thus, the researchers preferred institutions that have a cooperation protocol in the educational-social and cultural sense with the institution they work in and include special education services; conducted interviews with the authorities of these institutions. One-to-one permission was obtained from the mothers who agreed to participate in this study before the interviews, and the permissions were also confirmed at the beginning of the interviews. The ethics committee permission of the study was obtained from Hasan Kalyoncu University, Institute of Social Sciences (E-804.01-2009300018). The mothers's demographic information and the children with SN are shown in Table 1.

Table 1.

Demographic Information of the Children with Special Needs and their Mothers

Participants	Code Name	Characteristics of the Mothers			Characteristics of the children with SN		
		Age	Profession	Education Level	Age	Gender	Diagnosis
Mother1	Selin	32	Housewife	Associate Degree	6	Boy	ASD
Mother2	Ayşe	25	Housewife	Secondary School	4.5	Boy	ASD
Mother3	Fatma	30	Housewife	High School	5	Boy	ASD
Mother4	Ayda	38	Teacher	Undergraduate	8	Boy	ASD
Mother5	Leyla	35	Housewife	High School	3	Boy	ASD
Mother6	Gülay	32	Housewife	Illiterate	8	Boy	MD
Mother7	Ayşen	41	Housewife	Secondary School	7	Girl	MD
Mother8	Nisa	29	Housewife	Elementary School	7	Boy	MD
Mother9	Narin	39	Housewife	High School	3.5	Girl	HI
Mother10	Melis	30	Housewife	Secondary School	8.5	Boy	HI
Mother11	İnci	26	Housewife	Elementary School	3.5	Boy	HI

**ASD: Autism Spectrum Disorder, MD: Mental Disability, HI: Hearing Impairment

As shown in Table 1, the ages of the mothers varied between 25 and 41. They were housewives except for Ayda. According to the education level, the children of the mothers who were graduates of primary school and secondary education are between the ages of 3 and 8. Nine of the children were boys and two of them were girls; they had ASD, MD, and HI.

Researchers

Planning, preparation of data collection tools, determining the participant groups, permissions, interviews, data collection, analysis, transferring the analysis results into findings and reporting processes of this study were conducted by one faculty member, three instructors, and one classroom teacher who worked in the Ministry of National Education. Two of the researcher had an undergraduate degree in the special education field, one researcher had an undergraduate degree in classroom teaching and the other researcher has an undergraduate degree in preschool teaching. The first two authors continued their doctorate, third and fourth authors continued the graduate studies during this study. Four of the researchers had experience of 3-20 years in the special education field. Plannings were made regarding this research in the scope of doctorate courses in the 2020 spring term; primarily, the studies in the literature were examined, and the studies about the needs of families and teachers in COVID-19 period were comparatively examined. The instructors and the classroom teacher who worked in the Ministry of National Education took the responsibility of data collection, transferring the data to the digital environment, and analysis of the data; the faculty member took the responsibility of literature review, determining the subject field concerning method and content, analysis of the data, guidance in reporting, coordination of the research process and the ethical permission, spell check and giving feedback. The instructor and three authors who were in the study team had lecturing experience and academic studies about the qualitative research methods.

Data Collection Tool

The data were collected using the semi-structured interview in this study. To collect the data, first:

a. Characteristics and problem behaviors of the children with SN,

b. Proof-based practices in preventing and decreasing the PBs,

c. Studies based on problem behavior, Positive Behavior Support approach, home-based intervention programs, and behavior change techniques conducted with the children with SN, their parents, and teachers were examined. National and international study reports, articles, and book chapters were read in the first two months (February-March 2020) and they were discussed in the scope of doctorate courses in the related weeks and extracurricular research meetings. An interview question pool was then created based on the literature and

submitted for the expert opinion. The form created was sent to two faculty member experts who had working experience with special education field early childhood assessment, families, and teachers of the children with special needs. The experts' opinions about the questions were taken under the titles of "*appropriate, not appropriate, and should be changed*". The interview form took its final form following the opinions of the field experts about the interview form. The interview form, which took its final form, consisted of two parts. The first part consisted of the information about the child with special needs. The second part consisted of the information about the parent and the interview questions. The interview form consisted of 11 open-ended questions.

Data Collection and Analysis

The mothers who agreed to participate in this study were interviewed via telephone because face-to-face interviews increase the risk of spreading the pandemic during the COVID-19 and because of the lockdowns. Before the interview, appointments were made with the mothers for the day and time when they were available, and permissions were received to record the interviews. This study was conducted through telephone interviews with the mothers who accepted to participate in this study because of the pandemic's contagion risk. Pre-interviews were conducted before the interviews with the mothers. In the pre-interviews, the mothers were informed that the voice recordings would be taking at the time of the interviews, there should be no other people in the room so that the voices would not interfere and the telephone should be in a room with a good cell signal. The mothers stated that they conducted the interviews in a silent room without other people. The researcher conducted the interviews in the study room of their house to not face a problem during voice recording. The researchers first organized their home environment as a silent, appropriate environment in which they could record voice and take notes on the interview day. Then, while starting the interview, the mother was reminded of this study's purpose, and her approval was taken for the voice recording. The same questions on the interview form were asked to all mothers who participated in this study in the same order. The interviews were completed in 24 days between 24.04.2020-18.05.2020. The interviews lasted approximately 20-40 minutes (total interview data=400 minutes). Code names were given to the mothers and the family members mentioned during the study (children with SN) due to ethical factors. After the data collection, the interview transcript was written in the Microsoft Word document by the instructors and collected in a single file. Eighty-five pages of data were obtained in total as a result of the transcription of all interviews. To determine the correctness of the transcripts, inter-evaluators reliability was calculated; the consistency of three interview transcripts and voice records were examined. It was seen that there was no difference between the transcripts and voice recordings as a result of the examination. In the analysis of the data obtained, the content analysis method was used; concepts were provided to explain the data. Content analysis is the emergence of themes and sub-themes that enable to explain the data by reaching concepts from the data obtained (Yildirim & Simsek, 2018, pp.242-254). Repeating statements were

determined by reading the data obtained, and codes were created. Then, by bringing the relevant codes together, themes and sub-themes were created. Eight main themes and 49 sub-themes were developed as a result of data analysis. For the reliability between coders data calculation regarding the themes obtained, the codes, themes, and sub-themes determined by both authors were calculated using (Agreement/Agreement + Disagreement) x 100 formula developed by Miles and Huberman (1994). 89% value was obtained with the calculation.

Findings

This section of the present study includes the opinions of the mothers who have had children with special needs about the problem behaviors that occurred in their children during COVID-19, and their experiences during staying at home. Table 2 shows the problem behaviors that the mothers experienced most during COVID-19 as the children stayed at home, support needs of the family, and the children regarding these behaviors and the support they received from the special education institution they continued, school and experts. The findings shown in Table 2 also construct a base for the main theme and sub-themes of the present study.

Table 2.

Experiences of the Children with Special Needs during the Stay-Home Process

Experiences	Participants
Needs during COVID-19	
Social Adaptation	M1, M2, M6
Problem Behavior	M4, M10
Language and Speech	M6, M7, M8, M9
Learning Disability	M11, M3
Problem Behaviors Emerged in Stay-Home Process	
Tantrum	M1, M2, M3, M4
Yelling	M1, M5
Harming oneself and others	M6, M7
Crying	M1, M2, M3
Stubbornness	M4, M8, M9
Getting offended and angry when not receiving what they wanted	M11
The Area in which Support is Needed during Stay Home Period	
The Ability to Control his/her Anger	
Social Adaptation Skills	M1, M2, M3
Coping with Problem Behaviors	M4, M5, M6
Language and Speech Skills	M1, M3, M4, M7
	M7, M8, M9, M10
Type of the Support Received during COVID-19	
Via WhatsApp	M6, M7, M8, M9, M10
Not Receiving Education	M2, M3, M4, M5
Activity Table	M5
Support via Video and Photograph	M6, M11

Answers to the open-ended questions included in the demographic information form

were analyzed in Table 2. While the mothers stated that they needed support for language speech and coping with the problem behaviors in the stay home process, they also mentioned their need for supporting the social adaptation and learning processes of the children with SN. Mothers stated that they were mostly informed via WhatsApp in the pandemic process; they emphasized that the problem behaviors of the children were often seen as tantrums, crying, stubbornness; their answers to the questions about their experience of coping with the problem behaviors of the children with SN were described under eight main themes and 49 sub-themes. Each main theme and the sub-themes related to that theme were given as tables with the direct expressions of the mothers.

I. Main Theme: Problem Behaviors

Table 3.

Problem Behaviors Arisen in COVID-19

Main Theme	Sub-Theme
Problem Behaviors	1. Self-destructive Behaviors
	2. Not being able to Control Oneself
	3. Aggressive Behaviors

In the first theme, the mothers stated that the children's problem behaviors and self-destruction behaviors increased in the pandemic period; they were not able to manage their anger. They emphasized that they often showed these behaviors as hitting themselves, slamming the door, throwing themselves to the ground, and hitting their heads; they showed these behaviors when they could not express themselves or could not get what they wanted. **Leyla** stated the situation as, *"He gets angry faster, that's to say, and he gets angry and yells. Actually, he throws himself to the ground when he cannot receive what he wants."* In the aggressive behaviors sub-theme, mothers stated that their children showed anger, combative behaviors, spitting, licking, sudden yelling, and hitting behaviors. **Selin:** *"It's an incredibly tiring process, I can't even explain. He became more aggressive, angrier and his reactions got ugly. I think,it resulted from staying home."*

II. Main Theme: Reasons for Problem Behavior

Table 4.

Reasons for the Problems Arisen in COVID-19

Main Theme	Sub-theme
Reasons for Problem Behavior	1. Lack of Social Skill 2. Gaining Attention 3. Receiving an Object 4. Characteristic Trait 5. Attitude of Parents 6. Giving Feedback to the Reaction Shown after Problem Behavior

Ayşe, one of the participants who stated the problem behaviors shown by the children in this process under the lack of social skills, gaining attention, receiving an object, characteristic trait, attitude of parents and giving feedback to the reaction shown after problem behavior sub-themes, stated her opinion about lack of social skills as *"he cannot explain as he cannot express himself, has no social skills, so it affects him."* **Ayda** stated her opinions about her child's characteristic trait as *"My son is stubborn, so he yells and hits when he cannot get what he wants."* **Fatma** said *"he became extremely angry. He takes the phone and calls the police to make a complaint against me. I yell, and then he yells stronger."* for the giving feedback to the reaction shown after the PB sub-theme.

III. Main Theme: Methods to Cope with Problem Behaviors and their Effects

Table 5.

Mothers' Methods to Cope with Problem Behavior in COVID-19 and Effects of the Methods

Main Theme	Sub-theme
Methods to Cope with Problem Behavior and their Effects	1. Threatening 2. Ignoring 3. Paying off 4. Offering a Choice 5. Deprivation 6. Rewarding 7. Punishment 8. Giving Time for Expressing themselves (Effect) 9. Expect Kindliness from Mother (Effect)

As stated in Table 5, it draws attention that mothers use threatening, ignoring, paying off, and offering a choice, deprivation, rewarding, giving time for expressing themselves, and punishment methods to cope with the problem behaviors in the third main theme. The mothers stated that they observed a decrease in the problem behaviors or more violence use in the children after threatening, ignoring, paying off,

and deprivation methods included in the sub-themes related to the main theme. **Selin** stated that her children expect kindliness from her, while **Ayşen** stated that she uses rewarding among the methods to cope with PB. **Ayşen** said, *"We try to manage the process with games with Ela, but we use rewarding for Hüseyin. Otherwise, it's too difficult."* and drew attention that the method to cope with the behavior differed according to the personal characteristics of the children.

IV. Main Theme: Change in the Daily Life before and after COVID-19

Table 6.

Pre-COVID-19 Routines and Changing Daily Life according to the Mothers

Main Theme	Sub-theme
Chance in the Daily Life Before and after COVID-19	1. Importance of the Continuity of the Routines 2. Importance of Social Relation 3. Negative School Experience 4. Breaking the Routines 5. Diversity in the Types of Home Activities 6. Need for Access to the Technological Devices 7. Increase in Cleaning Habit

Mothers emphasized that they had routines before COVID-19 and their children had a social life. Mothers, drawing attention to the increase in the PBs during the pandemic, stated that they had observed these behaviors less in their children before. They stated the problem behaviors increased because the time spent at home got longer and the routines started to break; they were left alone in the problems that resulted from the problem behaviors they experienced during COVID-19. **Fatma**, one of the mothers who drew attention to their experiences about communication with the teacher, said *"We removed Kerem from school before Corona. He was showing behavioral problems. The teacher said to remove Kerem from school; she said he was not appropriate. Thus, we removed him from the school. We had already suspended education, on our own."* and stated that they removed the child from the school before the pandemic and stopped the education with their own decision. These main topics became prominent in the experiences of the mothers in the home education process after the COVID-19 related regulations: Breaking the routines, type of the activity (traditional games, artistic activities, sports activities, and water games), need for access to the technological devices and gaining and increasing cleaning habit. When examining the opinions regarding these sub-themes, **Selin** said, *"School is closed; we are always at home, telephone, television. I can say that he became addicted likewise. I say we shall watch cartoons for half an hour at most. He shows extreme reaction to this now; he yells."* and stated that the problem behaviors of the children with SN increased in this period in which the time spent at home increased. Mothers mentioned that they diversified the activities and focused on traditional games as their time increased.

V. Main Theme: Support Process Provided to the Child during COVID-19

Table 7.

Support Process Provided to the Child during COVID-19

Main Theme	Sub-theme
Support Process Provided to the Child during COVID-19	1. Providing Continuity in Education 2. Support of Volunteer Foundations 3. Family Education-Cooperation-Intra-Family Information 4. Positive Teacher Attitude 5. Educational Videos -Public Service Ad

In the fifth main theme, concerning their experiences in the support process provided to their children during COVID-19, mothers emphasized that they found the support of the volunteer foundations, family education-cooperation-family information to provide continuity highly positive, they also emphasized that the educational videos and public service announcements were very facilitative for themselves and their children. **Ayşe**, expressing the importance of the support of volunteer foundations, explained that they received information and support from the institution and people they met in online education more than the institutions they continued and said: *"I met an institution on social media. They directed us to the special education teacher. They incredibly helped us in this process."* Mothers stated opinions about the support provided for explaining coronavirus to the children concerning another positive effect of online expert family meetings and public service announcements. For example, they stated that they benefited from educational videos and public service announcements; visuals and animations were more effective in explaining the virus than verbal expressions. **Ayda:** *"We didn't have a television at home, we had put it away. But we bought a television. He started to watch the advertisements. He understood better. We explained but he didn't use to wear a mask. He saw and even wears a mask now."* and she mentioned the effects of the mass media for her 8-year-old son who has an autism spectrum disorder diagnosis on showing the behaviors he watched. In brief, mothers drew attention to the effects of interaction with teachers and information from the institutions for the family and the child.

VI. Main Theme: Needs Arisen in COVID-19

Table 8.

Needs Arisen during COVID-19

Main Theme	Sub-theme
Needs Arisen during COVID-19	1. Need for the Educational Adaptations 2. Need for Family Education 3. Lack of Providing Support for Inclusive Student 4. Need for Peer Support and Positive Effects in School Environment 5. Need for Social and Psychological Support 6. Need for Educational Appliances

Mothers drew attention that there were some deficiencies besides the supports they were satisfied during COVID-19. They stated that the area in which they needed support most was the behavior management at home and how to provide educational support to their children. They also emphasized that these needs were not decently met. Mothers stated that legal regulations were needed for the homeschooling period to be efficient due to the lack of educational adaptations, deficiencies in family education, and deficiencies in providing support to inclusive students; they also stated that they experienced some problems because the children were out of school environment and there was no peer interaction. For example, they stated that the siblings who show typical development also showed unwanted behaviors besides the children with SN who were devoid of positive peer support, following the examples in school, and interaction. **Selin**, one of the mothers who stated that they experienced inadequacy in educational adaptations-preparing and using educational appliances, explained the deficiency in family education by saying: *"Individual social support is needed. Teachers should inform us. We don't know how to cope with the process. We are in a difficult situation and attitude. We could have received support for this."* **Leyla** said: *"a group was created on the phone, the teacher send them all there. My children cannot do the same homework."* and stated that the educational adaptations should be special to the child and the support she received was inadequate.

VII. Main Theme: Experience of the Mothers during COVID-19

The seventh main theme of this study, pandemic experiences of the mothers included how they coped with the problems and the difficulties they experienced. The opinions in this theme were listed under the titles of COVID-19 and the family communication, psychological process- emotional reactions, increase in technological device addiction, the effects of working hours, taking more responsibilities, quality of time spent with the child, compromise on oneself, differences in mother roles and lack of father's support. The mothers stated that family communication was affected due to the working hours that changed during COVID-19. Given that the time spent at home by the working mothers and fathers differs. For example, because a father who works in the daytime and is at home in the evening cannot see his child in the daytime due to the changing working hours and the child goes to sleep when he comes home late in the evening emphasizes that the interaction has come to a stopping point in a sense. Thus, it was stated that the children longed for their working parents. Another topic that the mothers drew attention about the communication was sibling relationships. Mothers, stating that the communication between the siblings was disrupted, observed that the time spent at home caused a decrease in the quality of sharing and positive interaction. **Ayşe:** *"Unfortunately the relationship between siblings has problems. Obstinateness, yelling, and fights have increased. There is no harmony.* **"Gülay:** *"His father comes home tired as he works. So, he cannot take care of him much. He sometimes read books to Hikmet. This process tired us so much".*" **"Fatma:** *"My husband is on the night shift anymore, we work in turns. He comes home late at night and Ali is already asleep when he comes and he misses him so much. He tags along with his father when he*

doesn't go to work." Another sub-theme emphasized by the mothers in the seventh main theme was related to the changes in the emotional reactions in the psychological process during COVID-19. Mothers, expressing that they felt lonely, helpless, guilty with the decrease in social support, stated that the roles differed in this process, technological device addiction increased and they had difficulty in sustaining positive relations at home. For example, **Nisa** expressed her emotional reactions by saying: *"I am really tired now; we feel like death, I feel suffocated, it's too difficult to live together at home.*" On the other hand, it is possible to see participant opinions that emphasized the positive aspects of the time spent at home. One of the opinions that draw attention was that the long time spent at home because COVID-19 pandemic increased technology addiction both for the mothers and the children.

Table 9.
Experience of the Mothers during COVID-19

Main Theme	Sub-theme
Experiences of Mothers during COVID-19	1- Changing Family Communication
	2- Psychological Process - Emotional reactions
	3- Increase in Technological Device Addiction
	4- Changes in Working Hours
	5- Quality of Time Spent with the Child
	6- Compromise on oneself
	7- Differences in the Mother Roles
	8- Lack of Father's Support

VIII. Main Theme: Opinions and Suggestions

The last main theme of this study consisted of the opinions and the suggestions of the mothers. Mothers emphasized the necessity of providing psychological and social support to the families of children with SN, teaching them how to cope with problem behavior, educational support, nutrition, and physiotherapy. In this sense, they stated that it was necessary to increase the number of family education, technological support, and distance education quality; suggested that these preparations should include action plans, including education periods and vacation and emergencies. They stated that the education was given as much as possible through both communication instruments (TV, radio) and directing parents during COVID-19; they indicated that these were not sufficient; they needed support for behavior management and how to cope with PBs in this period in which the PBs increased. **Selin** said: *"Children are always at home anymore, they want to go out, outside is dangerous. We try to explain but he hits the door and cries. He has tantrums, screams. I do not know how to behave.*" and drew attention that they needed knowledge to cope with the difficulties they experience.

Table 10

Opinions and Suggestions

Main Theme	Sub-theme
Opinions and Suggestions	1. Providing Psychological and Social Support
	2. Teaching How to Cope with Problem Behavior
	3. Educational Support
	4. Nutrition and Physiotherapy Support
	5. Increasing the Family Education
	6. Technological Support
	7. Increasing the Quality of Distance Education

In conclusion, the findings described in eight main themes above which focused on the experiences of the mothers and obtained from their opinions showed that the mothers took more responsibility in care, communication, education, and health in the stay home process. Mothers stated that they felt lonely, did not receive support from their husbands and relatives mostly; emphasized that they needed support about the physical, educational and process-based regulations for turning the home into a qualified education environment although they had an opportunity to spend more qualified time with their children with special needs. They stated that the education and family support provided by the institutions during COVID-19 were inadequate. The mothers, stating that they questioned the quality of face-to-face education and homeschooling in this process, indicated that homeschooling should not only mean giving homework, practices without educational regulations were not effective in coping with the problem behaviors.

Discussion and Results

Two main factors can be mentioned as the source for this study. The first factor is the education of the children with special needs and the effects of negative behaviors on this educational process, the other factor is the methods of the families to cope with the negative behaviors observed in the children and experiences of the mothers about the education of their children in homeschooling process due to COVID-19. The study was conducted with 11 mothers; participant opinions were described under eight main themes. The opinions of the mothers generally focused on the problem behaviors of the children with SN during COVID-19, reasons of this behaviors, their methods for coping with these problem behaviors, routines before COVID-19, and changes in the daily life after COVID-19; negative effects of COVID-19 on family and child education, social relationships. The literature supports the opinions of the mothers. Lockdowns, uncertainties, working from home or differences in the working hours of a family member, not being able to continue to the school or education which emerged with COVID-19 affected the family life pattern. These changes caused differences in the behaviors of the parents; led to changes in family life. For example, with the sudden changes, the families cannot control their behaviors against the reactions given by their children in home life and may overreact. COVID-19 can be one of the reasons for

observing these behaviors in parents. As the behaviors of the adults can affect the children, the parents must be a model at home and support their children in the adaptation to the changes process (CDC, 2020). In the first theme, while mothers defined the children's problem behaviors at home, they explained these problems as self-destructive behaviors, not being able to control themselves, and aggressive behaviors. It is seen in the literature that the parents state hitting, fighting, pushing, biting as the examples of problem behaviors shown by the children in the home environment (Tomris, 2012; Toret et al., 2014). Mothers stated that they need support for how to cope with the PB; this need coincides with the finding about the necessity of providing support to the families for coping with the PBs of their children in the literature. Because, it has been emphasized that when the families respond to the PBs of their children with yelling, deprivation, using violence, and these behaviors cause the children to give sudden reactions, become angry, and have tantrums. It is necessary to show positive behaviors opposite to the PB, calm them down, and make explanations in this process. It has been suggested to the parents to create playtime with their children, enable sharings to increase social communication, showing role model behaviors that will remind the children that they are a member of the family via giving them responsibilities in the family, creating home routines based on the interests of the children in this period spent at home (Erdinc, Kaya & Irice, 2020; Parenteau et al., 2020). In the second theme, the mothers stated the reasons for their children's problem behaviors as lack of social skills, gaining attention, receiving an object, characteristic trait, attitude of parents, and giving feedback to the reaction shown after problem behavior. In a study with similar findings, it was stated that lack of social skills causes problem behaviors; the fact that the social skills increase while the PBs of the children decrease as a result of implementing the program created drew attention (Celik, 2012). There is a similarity between the mentioned study and the finding of this research. In another theme, methods to cope with problem behaviors and their effect, it is seen that the methods mentioned by the mothers are threatening, ignoring, or punishment. They stated that these methods increase the PBs and the children make the mothers' reactions more violent. Tomris (2012) stated that the mothers mostly use the punishment method against their children's problem behaviors. Another result of this study is the negative effects of the fact that the children with special needs stayed away from education during COVID-19. Their routines broke, and they couldn't see or couldn't spend enough time with family members. Thus, the children had difficulties during COVID-19 since they kept up with a new routine and stayed away from the education they had regularly received. The children with special needs (with SN) who continue their education with individualized education plans had a difficult experience both in education and social interaction as they stayed in the home environment and due to the lack of social and physical activities. In the studies that examined the experience patterns of the children and families in this (pandemic) process, (Colizzi, Sironi, Antonini, Ciceri, Bovo & Zoccante, 2020; Narsizi, 2020) similarly emphasized that the families had anxiety about their health to be protected from during COVID-19 pandemic and had to cope with the problem behaviors due to the changes in daily routines of the children. Yildirim, Karahan, Demiroz, Sener and Ozaydin (2020) drew attention that the parents had anxiety because their children stayed away from

education. They also stated that the routines broke caused problem behaviors, they had difficulty coping with the PBs and observed progress in some positive habits of the children.

The mothers underlined that the appropriate supports to strengthen the family life should be provided to minimize the negative experiences they had in the pandemic process. In this respect, mothers' opinions about their experiences of coping with PBs are smilar to the research findings. The necessity of family support education programs is emphasized in the literature (Tomris, 2012). Home-based practices given to the families provide information about what to do for the education of the children (Sanli, 2012). In this sense, the necessity for creating appropriate routines and timetables, preparing educational environments taking the children's age and developmental characteristics into account becomes prominent even though they are at home (Miller, 2020). Another prominent finding is the interaction with siblings and parents in the time spent together. In their study, Erdinc, Kaya and Irice (2020) stated that behavior patterns that challenge the parents such as wanting more sharing, messing up the toys, disorganization, washing the hands more often or less, hitting, screaming, and not obeying home safety precautions among the siblings with or without special needs. Another effect of the COVID-19 is the lack of freedom of action in children and an increase in the fights and violence among children with the increase in the time spent at home. Mothers, indicating that the communication between the siblings was disrupted, stated that they observed a decrease in the quality of sharing and positive interaction in the time spent at home. In a similar study conducted with the children who have siblings with ASD, Sengul, Erdem and Fazlioglu (2020) stated that the behaviors of the siblings change and they incline away from each other as the PBs increase. In two different studies by Orsmond and Seltzer, it was indicated that having a sibling with SN and autism causes adaptation problems and problem behaviors; family members have a stressful life as a result of this situation (Orsmond & Seltzer, 2000; Orsmond & Seltzer, 2007). Besides, the opinions of the mothers about the problems their children with SN experience with their children who show typical development show similarity with the finding that states the siblings with typical development are disturbed by the behaviors of their siblings with special needs towards themselves (Kahraman & Soylu Karadayi, 2015). Aytekin (2016) stated that the siblings experience communication problems among them because the children who have siblings with SN do not know how to communicate with their siblings and how to cope with the problems. Thus, the sibling who has stayed at home for a long time in the pandemic period could have had problems as they do not know how to communicate with their siblings with SN and do not have enough information and experience about their needs. Another important finding is the mothers' opinions about the support they received/didn't receive from the experts, institutions/organizations, or teachers in which their children receive education regarding their children's education in their COVID-19 support process experiences. The negative opinions stated by the parents regarding the fact that the need of their children and themselves were not properly handled, their need for expert support increased, and this need was not properly met during COVID-19 show similarity with the study conducted by Pavlopoulou, Wood & Papadopoulos

(2020). It has been stated in this study that the families have a feeling of loneliness and helplessness when they need support and this need is not met as stated by Pavlopoulou et al. (2020). The mothers mentioned that they do not want their children's education to be interrupted, so they meet their need for information and support via volunteer foundations, educational videos, and public service announcements. They also emphasized the need for digital environment materials specific to each disability type. This finding shows parallelism with the finding that states digital support use can constitute a positive effect in the special education process (Sani Bozkurt, 2017). Consequently, while mothers coped with the intra-family relations and PBs on the one hand, they had to cope with the difficulties resulted from the lack of educational regulations for their children and lack of family education on the other hand. Thus, the need for social and psychological support increased; however, problems were experiences because they could not access these supports. This finding and the findings of the research findings, which focus on the needs of the families in the pandemic period conducted by Yildirim et al. (2020) are similar. It also draws attention that the mothers also state the opinions about the family participation, needs of the family, educational adaptations specific to the disability type in the literature. Support needs of the families regarding the family functionality, difficulties faced in the early childhood period and the experiences about how to cope with these difficulties are similarly mentioned in the findings of the studies conducted by Sardohan Yildirim and Akcamete (2014); Kaytez, Durualp and Kadan (2015); Pavlopoulou, Wood and Papadopoulos (2020).

When generally examining the findings obtained in this study, they are consistent with three main problems seen in the education of the children with special needs in the pandemic process stated in the United Nations Report (2020). The report states that the families have difficulty in reaching the materials, the importance given to the education is inadequate and learning gaps arose in the coronavirus period. In this study, the mothers stated that effective intervention plans should be prepared. This suggestion had also been stated in the findings of the study conducted by Asbury et al. (2020) and emphasized the significance of evaluating the special needs of the families and taking concrete steps to meet these needs. When examining the family life and experience of coping with the PBs of the children with special needs in the pandemic process, it is seen that the mothers handled this process on their own and they thought they deprived themselves Lack of father's support and the mothers tried to constitute the balance at home on their own may have caused tiredness and burnout in this process. It has been stated that when there exist factors that affect their life negatively and they do not receive support to cope with this negative situation, the mothers may think they are lonely, experience a psychological breakdown related to the increase in the stress and anxiety (Asbury, Fox, Deniz, Code & Toseeb, 2020; Eshraghi et al., 2020; Parenteau et al., 2020; Sivrikaya & Ciftci-Tekinarslan, 2013). Mothers also stated that they observed an increase in technology addiction due to physically spending time in the same environment (home) constantly; thus, the family communication and their relation with their children were damaged. Opinions of the mothers about the technology addiction show similarity with the finding   stated in the

study conducted by Pavlopoulou, Wood and Papadopoulos (2020) that states the fact that the addiction of the primary caregivers of the children to the technology-based communication instruments, online sources should decrease.

In brief, the mothers who participated in this study want to learn how to cope with the problem behaviors to support their children. Thus, they stated they need counseling and education. Similarly, Ozen, Colak and Acar (2002) have emphasized that the mothers need counseling to cope with the problem behaviors, need psychological and social support in this challenging period in the literature (Karahan, Yildirim, Demiroz & Ozaydin, 2020; Toseeb, Asbury, Code, Fox & Deniz, 2020).

Suggestions

The results of the study provide the following suggestions regarding the family, teachers, and the authorized institution-people. Education about the definition and reasons of the problem behavior and how to cope with the problem behaviors may be given to the families. Especially planning based on face-to-face education and distance education processes, related action plans can be developed. Planning based on the children with SN and their families should be created. These regulations should also take the type and level of the disability of the child, characteristics of the family environment, and needs of the parents into account. Online education environments can be developed, sharing of information and experience can be provided; the needs of the families and the children can be met in the scope of social support. Intervention can be performed regarding the improvement of the administrative knowledge and skills related to the distance education process of the institution administrators and the teachers of the special education institutions. Digital education seminars can be prepared by the universities affiliated with the Higher Education Institution (YOK) and research and application centers. It can be suggested to create sources regarding meeting the psychological and physical needs of the families who have children with SN in a pandemic, natural disaster, or a similar negative condition. Digital environments in which the feedbacks to improve educational and environmental regulations to the best condition possible for the families and their children with special needs can be created. Awareness studies to make the fathers' role more effective in supporting the child with special needs in education and different developmental areas can be conducted; education regarding the fathers can be organized.

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Examination of the Quality Teaching in Turkish Higher Education Based on the External Evaluation Reports from Multiple Perspectives

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Abstract: External evaluation has a critical function to promote quality. In this study, the Turkish Higher Education System's teaching quality was examined through multiple perspectives. For this purpose, the institutional external evaluation reports prepared for 115 higher education institutions in Turkey were analyzed according to the International Quality Assurance Standards, National Institutional External Criteria, and the literature's quality indicators. The content analyses, which were conducted independently by the researchers, were compared to derive the findings. findings revealed findings revealed a lack of conceptual components, accountability, and detailed submission reports in terms of reporting. The analysis concluded that the input dimension was prioritized, whereas the process and output dimensions were neglected in the external evaluation criteria. Three different quality indicators revealed that the level of quality teaching in Turkish higher education was low. The implications were developed to promote quality teaching.

Keywords: Higher education, quality teaching, national criteria, international criteria.

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Introduction

The tendency for the numerical growth in higher education is giving way to institutional regulations to improve the quality in education around the world. Matters such as quality, qualification, recognition, and employability become prominent (Cetinsaya, 2014; Hénard, 2010; Kavak, 2011; Tekneci, 2016). Higher education institutions focus on ensuring quality assurance systems, recognition, mobility, competition, paradigm change in learning, and graduates' employment (Wells, 2018). The balance between research and teaching, which are the primary functions of universities, has resulted against teaching in recent years (Hacıfazlıoğlu, 2006; Üstünlüoğlu, 2017). However, ignoring quality teaching has affected training negatively (Gunn, 2018). The higher education system, which has a crucial responsibility in social and economic development, can fulfill its responsibility through qualified graduates trained via quality teaching. It is of the utmost importance of the political aims to equip students with knowledge, skills, attitudes, and behaviors which the era require and labor market demand through quality teaching (Ministry of Development, 2018; Ministry of Education, 2019). Therefore, reformative interventions should be conducted to promote quality teaching in higher education by revealing its facts and identifying its strengths and limitations. Otherwise, a covert constitution, which can negatively influence a country's social and economic developments, can be overlooked. According to evidence-based decisions, the reformative interventions present the current situation in a valid and reliable way. However, few studies focusing on the quality teaching in the Turkish higher education were reached. These studies just deal with certain programs of particular universities (Hacıfazlıoğlu, 2006; Üstünlüoğlu, 2017). A research using comprehensive and different indicators was needed. In this study, more than half of the Turkish universities examined regarding quality teaching through three different quality indicators. As this study is one of the limited studies examining the quality teaching in the Turkish higher education institutions through document analysis, it is thought to contribute to the application and literature in higher education studies.

Quality

Quality is to satisfy users by fulfilling their needs through standardized services or products. The main idea of quality is to acquire better outcomes by improving processes. When it is applied to education, it is to implement training services conforming to standards, to make stakeholders, particularly students and their parents satisfied with training, and to enable students to apply their acquisitions in real life (Özdemir, 2015; Yıldırım, 2018). Quality in higher education means *higher education management quality*. The primary indicator for this quality is to provide training meeting students' needs in their real life. The treatments conducted to realize this purpose constitute *quality culture* (Elken & Stensaker, 2018).

Quality in Higher Education

The initiatives to improve higher education quality have ensured quality assurance systems to emerge. The quality matter in higher education has turned into a global action plan through the Bologna Process. European Association for Quality Assurance in Higher Education (ENQA) was founded to form a shared higher education network to ensure a harmony and coordination among the quality development applications. In this regard, ENQA identified the Standards and Guidelines for Quality Assurance (ESG). These standards' main focus is student-*centered approach to teaching and learning*. In line with ESG, the standards for quality assurance consist of *internal quality assurance, external quality assurance, and quality assurance agencies* (ENQA, 2015). National higher education institutions have adapted ESG including quality teaching and learning to integrate into their national systems (Alzafari & Ursin, 2019). ESG can differ as every country's historical and cultural context shape teaching-learning processes (Stensaker & Leiber, 2015). Higher education institutions have developed two different interventions. The first one is administrative intervention focusing on quality issues. In this type of intervention, independent quality assurance agencies run internal supervisory mechanisms concerning external evaluations. The main aim of quality assurance system is to improve students' learning (Bollman, 2001). The second one is to install quality culture across all universities (Elken & Stensaker, 2018). In the implementation of ESG assessment, the basic processes consist of self-assessment, an external assessment containing a site visit, an external assessment report, and a follow-up (ENQA, 2015, 18). External neutral observations for higher education institutions and reports concerning quality issues create development opportunities (Stensaker & Leiber, 2015). These reports involve the data, making higher education institutions' instructions more effective and meeting their needs (Hénard, 2010).

Turkey like a number of countries (Gumus, 2018; Kaya, 2017; Wang, Sun & Jiang, 2018) has embarked on the quality standards in higher education in the context with the Bologna Process (Akar & Babadogan, 2018; Stensaker & Leiber, 2015). These countries have committed to conform to the internal and external quality assurance standards and principles in line with ESG. It appears that the Bologna Process and ENQA play an effective role in shaping the higher education of Turkey (Ozdemir, 2015). Turkish Higher Education Quality Council (THEQC) was founded within this scope and quality assurance system has been put into effect (CoHE, 2018). In this regard, higher education institutions are supposed to identify their strategic plans based on their self-assessments and create a constant improvement system. In this respect, *external observer site visits, self-assessments, reporting, feedback, and tracking processes* are conducted. Quality standards are determined to make evaluations. Higher education institutions are evaluated according to their management and decision making, researching, quality culture, serving public, and internalization dimensions. The answers for the questions *"what is done?"*, *"how is it done?"* and *"how are people informed about it?"* and *"how does the institution develop?"* are sought (Dakovic & Gover, 2019). As a result of these evaluations, it is reported and declared to what extent a higher education institution conforms to quality standards. It

is certified that it is subject to external evaluation in every five years in this process (CoHE Bologna Process, 2014; ENQA, 2015).

Policies to Improve Teaching in Higher Education

One of the Bologna process objectives is to assure *quality teaching and learning* (Alzafari & Ursin, 2019; Bollman, 2001; Elken & Stensaker, 2018). Teaching is shared according to individuals, philosophy and values. *Quality teaching* is a basic means to transform educational process. Quality culture aims to ensure interaction between instruction and research (ENQA, 2015). Education is a dynamic field, which can be reorganized according to universities' contextual conditions such as innovations, regional developments, and citizenship relationships. It enables candidates to acquire new knowledge and skills they will require in their work life. Students demand education and teaching to equip themselves with the knowledge and skills they need (Hénard, 2010; Kavak, 2011). If their demand is not met, they characterize it as a poor quality teaching (Dicker, Garcia, Kelly & Mulrooney, 2019; Joshi, 2017). The ESG external and internal quality assurance standards for *student-centered learning and teaching* are as follows (ENQA, 2015: 18): *i)* students' needs and differences should be satisfied through flexible learning channels; *ii)* different and effective teaching styles should be used; *iii)* various pedagogical methods should be implemented flexibly; *iv)* pedagogical methods should be regularly monitored and adaptations should be made in these methods to make teaching effective; *v)* students should be guided and encouraged to undertake their responsibility and autonomy for their learning; *vi)* a mutual respect between student and instructor should be formed; *vii)* a mechanism should be implemented to deal with students' complaints. In the *assessment and evaluation* dimension: *i)* evaluators (teachers) should be supported to improve their evaluation-assessment skills; *ii)* students should be informed about the assessment criteria beforehand; *iii)* assessment should inform students to what extent they learn the aimed acquisitions. If it is necessary, it should guide them how to learn; *iv)* if it is possible, at least two evaluators should be involved; *v)* regulations should be employed to decrease the negative sides of assessment; *vi)* evaluation-assessment should be employed to all students according to the fair and pre-determined processes; *vii)* an official process should be defined for students' objections.

THEQC identified National Institutional External Evaluation Criteria (NIEC) to transform ESG criteria to the national ones in the context with the standardization of the external evaluations (2016:3). S*tudent centered learning, teaching, and evaluation* sub-dimensions in NIEC are used as indicators for quality teaching. External evaluators regarding these indicators monitor quality teaching in higher education institutions. THEQC releases annual feedback reports considering Institutional Follow-Up Reports (IFUR). Some quality indicators for the evaluation of *student centered learning, teaching, and evaluation* sub-dimensions are: *i)* application examples implemented in the centers for teaching and learning, *ii)* student-centered educational practices, *iii)* questionnaires involving students' feedbacks, *iv)* academicians' competency

concerning student-centered teaching (learning-teaching and evaluation-assessment methods).

Although quality teaching evaluation is an extremely complicated and difficult issue, it can be determined according to input, process, and output indicators (Hénard, 2010; Ustunluoglu, 2017). More attention is paid to knowledge, skill, and outcomes acquisitions, which create resources for concrete outputs. Rather than number of graduates, their knowledge, skill, and outcomes are considered. Gunn (2018) explains three basic dimensions in a quality teaching indicating *teachers' interaction with their students, teachers' mobilizing students, and learning something new*. In this framework, organizing, implementing and evaluating a lesson, and providing students with feedback concerning their lesson develop their knowledge, skills, and outputs. The teaching practices, which enable students' learning and development, give information about quality teaching concerning the materials, resources, curricula, assessment-evaluation of students' learning, and reporting process and styles. Nowadays, institutional external and internal evaluations aim to reveal how institutional units function and quality matters in academic activities (Stensaker & Leiber, 2015). Besides, students' perceptions for teaching and learning activities are identified (Dicker, Garcia, Kelly & Mulrooney, 2019). On the other hand, as students' satisfaction levels vary according to their academic qualities (Başoğlu, 2019), their satisfaction with quality teaching is not just an indicator (Gunn, 2018). In recent years, a particular focus has been placed on the inspiring and transformative features of teaching based on their perceptions and experiences. However, Wang, et al. (2018) argue that students' evaluations provide general data that do not fulfill the primary purpose of making teaching more effective. Their evaluations supply data concerning classroom management, students' attitudes, and teaching methods. At this point, multiple indicators are suggested to be used together. For instance, students' portfolios, group interactions, project reports, academicians' qualities, and number of students per academician can be utilized (Gunn, 2018; Ustunluoglu, 2017).

Dicker et al. (2019) posed several questions to determine university students' perceptions for quality teaching and learning in terms of input, process, and output dimensions: "Do academicians ensure your learning?" "Are various teaching methods used?" "Do these methods ensure your learning?" According to Ustunluoglu (2017), the elements of effective teaching includes, explaining the learning objectives to students beforehand, involving all students' participation in lesson, transforming conceptual and theoretical knowledge to application, developing students' skills to ask questions, creating a positive classroom environment, forming coherence between assessment-evaluation and teaching, and using assessment-evaluation as a means of developing students' learning. Besides, Hacifazlioglu (2006) remarked that *students should be informed about evaluation criteria beforehand*.

The studies dealing with *universities' current situations with regard to quality teaching* in the literature were reviewed. Hacifazlioglu (2006) examined the teaching processes and learning sources based on the students' perceptions studying in the faculties of

management and education at two metropolitan universities. In this study it was found that they have positive attitudes towards the teaching processes and learning sources. It was revealed in the study conducted by Ozdemir (2015) that there is a low significant difference among the academic achievements of the students studying in the faculty of education at a Turkish university, teaching processes in their units, and learning sources. Basoglu (2019) identified a significant difference between the students' qualities at a private university and their perceived quality of education and research publishing opportunities at the university and the academicians' perceived quality of education. Hénard (2010) examined quality teaching and learning in 29 higher education institutions in 20 different countries. Dicker, Garcia, Kelly and Mulrooney (2019) indicated in their studies how the students, academicians, and the other employees perceived the quality teaching and learning at the university in the UK. In the study, the students were satisfied with the teaching and learning activities, whereas they were hesitant about the quality education they got. It was found that the students and academicians have different opinions. A similar result was identified by Ustunluoglu (2017, 2016). In similar two studies, the researcher compared the perceptions of the students and academicians involved in the faculties of education of one university in Turkey and one university in Slovakia; and one university in Turkey and one university in the USA with regard to the qualities of teaching methods, classroom management, and assessment-evaluation activities implemented in the lessons. According to students, the academicians could not meet students' expectations, and their pedagogical competencies were perceived to be at a low level. Joshi (2017) confirmed that the quality teaching is low at a university in India based on the students and academicians' perceptions. The students in the study conducted by Wang, et al. (2018) indicated that the instructors' teaching skills are the most important dimensions. However, they explained that their lessons' quality teaching could not meet their expectations. In this study, the instructors' academic titles and experiences were determined not to be effective to ensure the quality teaching. Akar and Babadoğan (2018) found that the internal evaluation reports concerning the adoption of the quality culture in the faculties of education of several universities in Turkey are not read by the academician administrators or are believed not to reflect the reality. The literature review indicated that there are a number of descriptive studies (Basoglu, 2019; Dicker, Garcia, Kelly & Mulrooney, 2019; Hacifazlioglu, 2006; Joshi, 2017; Ozdemir, 2015; Pedro, Mendes & Lourenço, 2018; Ustunluoglu, 2017; Wang, et al., 2018) examining a particular university or faculty at a particular period with regard to quality. However, it was identified that few studies (Dakovic & Gover, 2019; Hénard, 2010) were conducted to comprehensively promote *quality teaching* in higher education. Therefore, more studies are required to be implemented for quality teaching in higher education (Ustunluoglu, 2016). There are a quite few research studies on the quality of teaching in the Turkish higher education institutions. However, studies on evaluating the quality of teaching in higher education are rare to find in literature.

Purpose and Research Questions

This study's main purpose is to evaluate quality teaching in higher education. In line with this purpose, the following questions were formed:

i) What are the contents related to the teaching and learning evaluations in 2016, 2017, and 2018 Higher Education Evaluation and Quality Assurance Annual Situation Reports (HER)?

ii) To what extent were the evaluations made in HER according to the National Institutional External Criteria (NIEC), the Standards and Guidelines for Quality Assurance (ESG), and the quality teaching indicators that were obtained from the literature review (QIL)?

iii) What is the current situation of the Turkish universities concerning the quality teaching in HER according to the National Institutional External Criteria (NIEC), the Standards and Guidelines for Quality Assurance (ESG), and the quality teaching indicators that were obtained from the literature review (QIL)?

iv) In which dimensions were the developments and matters identified in the Turkish higher education concerning the quality teaching in 2016, 2017, and 2018?

Methodology

Research Design

This study was carried out as qualitative research, and document analysis was considered to be the most appropriate method to find answers for the research problems. As the criteria were predetermined before starting the content analysis, this type of content analysis can be categorized as criterion based content analysis (Fraenkel, Wallen & Hyun, 2012). The criteria in this study were the National Institutional External Criteria (NIEC), the Standards and Guidelines for Quality Assurance (ESG), and the quality teaching indicators that were obtained from the literature review. The research model is displayed in Figure 1.

1st Step: Access to Resources	2nd Step: Identifying Teaching, Learning and Evaluation Content	3rd Step: Criteria Based Content Analysis
2016 HER	2016 HER	3a.ESG 3b.NIEC 3c.Literature
2017 HER	2017 HER	2016 HER
2018 HER	2018 HER	2017 HER
		2018 HER
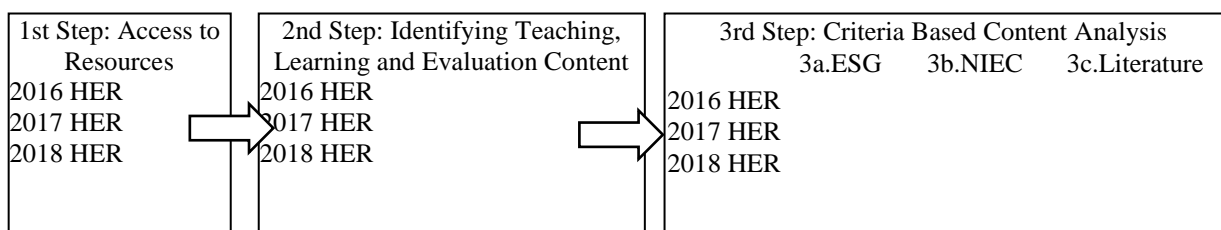
Figure 1. Research model

Data Sources

External assessment reports provide researchers and decision makers with the data for quality teaching in higher education institutions. They include site visit and interviews concerning teaching-learning dimension in accordance with ESG (ENQA, 2015). They describe the current situations for quality teaching in these institutions. According to Elken and Stensaker (2018), the external assessment reports can indicate the attempts to develop higher education quality assurance. It is possible to obtain data in different dimensions examining Higher Education Evaluation and Quality Assurance Annual Situation Report (HER), which is prepared by the external evaluation commissions. The reports are analyzed according to national, international, and the literature criteria and can shed light on the intervention points to improve quality teaching in higher education.

This study's main data sources constitute "Higher Education Evaluation and Quality Assurance Annual Situation Report (HER)" published by THEQC. 20, 50 and 45 higher education programs were included in the institutional external evaluation programs 2016, 2017, and 2018, respectively. 115 out of 206 higher education institutions were involved in the external evaluation process (THEQC, 2019). HER is prepared based on the reports written in these institutions' external evaluations. Three HERs were published in 2017, 2018, &2019. These reports are available on the official website of THEQC. The report 2016 was released in 2017. The sections such as *the main principles for external evaluation, the overall evaluations of institutional internal evaluation reports (IIER), the suggestions to improve the process, the feedbacks of the presidents of the external evaluation commissions, the external evaluation acquisitions, and the evaluations for the feedbacks derived from the institutions subject to the external evaluations* are provided in the report (THEQC, 2017). The situation report 2017 was published in 2018. Apart from the previous report, the latter report included additional sections, including the situation reports for *regional development focused universities and research focused universities* (THEQC, 2018). The report 2018 was published in 2019. In addition to the former two reports, the consistency between *institutional internal evaluation report* (IIER) and *institutional feedback reports* (IFR) was dealt (THEQC, 2019).

Data Analysis

Three different content analysis instruments were used in the study. The first instrument was ESG standards which were publicly declared by ENQA (2015). The second instrument was NIEC which was designed based on the ESG by THEQC (2016). The third instrument was formed based on the quality indicators which were identified in the literature review (QIL). As ESG standards (ENQA, 2015) and the quality indicators for NIEC (THEQC, 2016) had been published beforehand, each item / indicator as a separate item in line with the analytical evaluation was indicated. So, ESG standards involve 13 items, NIEC 6 items, and QIL 13 items.

The studies included as the third data analysis instrument (QIL) were identified from the literature review. The items such as *student centered learning-teaching and evaluation* were selected in these studies (Basoglu, 2019; Dicker, et al., 2019; Gunn, 2018; Hacifazlioglu, 2006; Hénard, 2010; Joshi, 2017; Ozdemir, 2015; Ustunluoglu, 2017; Wang, et al., 2018). Two researchers reviewed the related studies independently to identify QIL items, combined them in a shared data pool, and prepared a shared form by comparing the tentative items. These items were edited through the combination and restatement. Three academicians, who received their doctorate in the fields of educational administration, assessment and evaluation, and curriculum and instruction, examined the edited items. Based on the perceptions of the independent reviewers, two items, which had the close meaning, were reduced to one item (*Conceptual knowledge is materialized and theoretical knowledge is put into practice*, item 6) and one item was re-edited (*what are taught in lessons instead of lessons*, item 9). In this way, the third data analysis instrument was finalized. QIL has four dimensions, namely teaching process, assessment, learning environment, and satisfaction. The researchers piloted the QIL on a randomly selected HER report. As it worked on this report, the researcher decided to conduct the content analysis.

The content analysis of the reports was implemented in three stages. As an initial stage, all of the HER reports were accessed by the time the current study was conducted. In the second stage, the sections concerning *student centered learning-teaching and evaluation (SLTE)* were looked for and selected in the reports. Then, they were coded regarding predetermined codes explained in the following lines. Six pages were allocated for SLTE (pp.41-46) in HER 2016; eight pages (pp. 36-43) in HER 2017; and eight pages (pp.36-41) in HER 2018. In this process, three field experts identified the contents separately and scored the extent to which the contents met the criteria. They developed a shared coding and rating examining HER 2016 together in this context. Then, HERs 2017 and 2018 were analyzed independently and the content for SLTE was determined. The consistency among the content was determined (see Table 1). It was confirmed that nine out of 42 sub-titles had lack of consistency and this was handled through comparison with the main source, restatement, combination, or elimination of the statements. The final stage was scored to what extent the content in Table 2 met the criteria in the measurement instruments. At the same time, the higher education institutions' situation with regard to the related criteria was qualitatively indicated. So, both quantitative and qualitative data for 32 criteria (six criteria NIEC; 13 criteria for ESG; 13 criteria for QIL) were derived. The quantitative data score for each criterion was rated between 0 and 3. Zero (0) indicates the item in the data analysis instrument is not met; one (1) at low level; two (2) at a moderate level; three (3) at a high level. The agreement among three independent raters was examined for 2017 HER and 2018 HER separately. Kendall's W. Kendall's W is used to calculate the agreement among more than two raters and 0.60-0.80 good agreement (Grothe & Schmid, 2011; Pallant, 2010). According to the results of Kendall's W analysis in Table 1, there is a good agreement among the raters.

Table 1.

Statistical Results for the Agreement among the Raters in the Content Analysis

| Statistics | 2017 HER | | | | 2018 HER | | | |
	NIEC	ESG	QIL	General	NIEC	ESG	QIL	General
Number of items	6	13	13	32	6	13	13	32
Kendall's W[a]	.670	.597	.837	.731	.862	.834	.834	.850
Chi-Square	10.054	21.507	30.140	67.974	12.935	30.040	30.040	79.017
Df	5	12	12	31	5	12	12	31
P	.074	.043	.003	<.001	.024	.003	.003	<.001

a. Kendall's Coefficient of Concordance: Number of raters=3

The score intervals were identified to interpret the derived total scores. The interval scores for ESG standards and QIL are as follows 0-7 (very low), 8-15 (low), 16-23 (moderate), 24-31 (high), and 32-39 (very high). The scores for NIEC are as follows 0-3 (very low), 4-7 (low), 8-11(moderate), 12-15 (high), and 16-19 (very high). In the qualitative data, the relation of data in the examined paragraph with regard to the item was explained. In this way, the higher education institutions' quality teaching was evaluated. Both the quantitative and qualitative data were coded and written in the data analysis instrument form. This procedure was also implemented for the second and third data analysis instruments.

Consistency and Establishing Trustworthiness

This study considered alternative epistemology principles. The nature of reality is put forward via different perspectives. People views qualitative findings through different paradigmatic lenses (Patton, 2002). This study's data sources, including HER 2016, 2017, and 2018 are accessible by everyone and their access addresses were provided (THEQC, 2017, 2018, 2019). This increases the trustworthiness of the study. The validity of the study was ensured considering the perceptions of the experts in the field of education for ESG, NIEC, and QIL instruments to determine the student centered teaching content. The experts were enabled to determine and rate the content independently to prevent the negative effects of biases. The consistency reliability among the examiners was calculated to ensure its reliability and consistency. Besides, the internal consistency of the content was tested with regard to "contradiction-consistency" aspect. The derived results were separately submitted to the experts who conducted the content analysis and their consistency with the main resource was controlled, which supported the trustworthiness of the study.

Findings

The quality teaching in Turkish higher education was examined according to the external evaluation reports from multiple perspectives. The examination was conducted in line with the research questions. The answers for these questions were provided in this part.

What are the Contents related with the Teaching and Learning Evaluations in 2016, 2017, and 2018 Higher Education Evaluation and Quality Assurance Annual Situation Reports (HER)?

The content identified for this sub-problem was indicated under 14 themes in Table 2. The content for 8 themes out of 14 themes was determined in each HER. Eight themes were included in HER 2016 and 2017. HER 2018 contained 11 themes. HER 2018 is different from the previous reports regarding style in the sense that it presented the strengths and aspects that are open to improvement under separate titles (THEQC, 2019). The report depicted "the ideal situation" with obligations rather than define "the current reality" through quantitative and qualitative data. This makes it hard to evaluate the situations identified in HER 2018.

It was observed in the reports that a change occurred in the importance of the issues based on the detailed content analysis. To illustrate, the importance of "tracking the acquisition of competencies" had decreased in the upcoming years, whereas the importance of "active based learning" had increased. The issue for training for trainers had also increased. In the last report, the most emphasized themes were "tracking and updating curricula" and "support and access to learning resources".

It was identified in the reports that the strengths of the Turkish higher education system were the physical environment and instructors' presence. However, the aspects such as knowledge, skill, and application should be developed. For instance, the treatment to improve the acquisition of the competencies regarded as the most distinctive problem despite the institutions' technological infrastructure. Similarly, another problematic issue was to use assessment- evaluation to enable students to learn better. Although there was a positive classroom environment in the institutions, the most problematic aspect stemmed from "the effective and various activities to meet learners' needs and expectations". In this regard, it was indicated that the instructors' qualities were high. However, it was emphasized that they should increase their teaching competencies. So, it was stated that the issue for trainers' training was open to improvement.

Table 2.

The Content Identified for SLTE in HERs by Years

No	Theme	HER 2016	HER 2017	HER 2018
1	Supports and access to learning resources.			The strengths of the institutions are the facilities and infrastructure where training activities are implemented.
2	Curriculum design and its competencies in accordance with National Qualifications Framework for Higher Education in Turkey (NQFfHE)		It is a legal obligation to determine students' competencies in accordance with the knowledge, skills and competences in National Qualifications Framework for Higher Education in Turkey (NQFfHE). Only 16 % of the institutions associated their learning outputs with NQFfHE and published them in national and international languages (THEQC, 2018: 42).	The compatibility of the curriculum competencies with NQFfHE is open to improvement.
3	Constant tracking and updating curricula			The curricula of the majority of the institutions (83%), which were involved in the external evaluation program, should be constantly tracked and updated (THEQC, 2019: 37). The external stakeholders' perceptions should be regarded to design and update the curricula.
4	Tracking the acquisition situation of the aimed competencies and improving it	The need for the assurance to enable students to acquire the aimed competencies and to determine their achievements through assessment- evaluation was stated. Nearly one in four institutions (26%) met the expectations to track the acquisitions situations of the aimed competencies and to improve it.	More than half of the higher education institutions (n=50) did not track the access to the curricula competencies. Only 25% of the institutions met the expectations to track the students' acquisition situations of the aimed competencies and improve it (THEQC, 2018: 37).	Determining the students' acquisition situation of the curricula competences is open to improvement. The most important aspect was to fulfill the acquisitions.
5	The effective, fair and transparent evaluation system	To meet the expectation to create an effective, fair and transparent evaluation system was fulfilled at a low level.	Only 33 % of the institutions could meet the expectation to create an effective, fair and transparent evaluation system.	The instructors should use student centered evaluation approaches in their lessons.
6	Evaluation based learning outputs	The expectation of using evaluation system based learning outputs was met in only 25 % of the institutions.	The expectation to use evaluation system based learning outputs was met in only 14 % of the institutions (THEQC, 2018: 37).	The need to make compatibility among learning outputs, students' workloads, learning-teaching practices and assessment-evaluation was stated.

7	Active teaching approach based student and learning	The most of the institutions failed to meet the expectation to embrace student centered training. The strategies supporting active learning should be commonly used and teachers should use these strategies in their teaching practices. Only 16 % of the institutions met the expectation to use learning based teaching.	Only 4 % of the institutions met the expectation to embrace student centered training. The strategies supporting active learning should be commonly used and teachers should use these strategies in their teaching practices. Only 6 % of the institutions met the expectation of using learning-based teaching and increasing students' awareness (THEQC, 2018: 38).	With regard to SLTE criterion, a regression was determined compared to the former period and the need to improve the processes was stressed (THEQC, 2019: 28). The definition of the processes for the student-centered active learning method is open to improvement. Besides, students should undertake active roles in learning process. Student-centered training processes have not matured yet or different approaches have not been implemented in 77 % of the higher education institutions (THEQC, 2019: 38).
8	Course information package	There are still problems for easy access to course information package.		
9	21st. century skills	The institutions have problems to enable their students to acquire 21st-century skills.	The institutions have problems to enable the students to acquire 21st-century skills.	It is important to run the mechanisms to enable the students to acquire the 21st-century skills.
10	Elective courses from different disciplines	Only 16 % of the institutions met the expectation to reconstruct the electives courses, which can give the students a chance to recognize the cultural depth and different disciplines.	The elective courses met the expectations of the 20 % of the students.	It is important to run the mechanisms to enable the students to recognize the cultural depth and different disciplines.
11	Professional practice and fieldwork	The standards should be adjusted to implement professional practices such as internship and fieldwork.	The standards should be adjusted to implement professional practices such as internship and field work. Only 24% of the institutions met the expectations on this issue (THEQC, 2018: 40).	The implementation of internship and workplace training are strengths of the institutions.
12	Student workload	There are problems to associate student workload with teaching techniques and assessment - evaluation.	Educational activities, including course hours, assignments, presentations etc. should be considered to calculate student workload.	
13	Consultancy	Consulting services for students should be developed (THEQC, 2017: 43).	The need to extend the scope of consulting services for students was emphasized. The 30 % of the institutions met the expectations in this issue.	Consulting service is strength of the institutions.
14	Training for trainers	Training for trainers should be improved with regard to period, content and practices.	The course content should be upgraded in the context of the training for trainers and academic staff' teaching techniques (THEQC, 2018: 42).	The qualified academic staff is the strength of the institutions. However, the curriculum for training for instructors is open to improvement.

What is the Current Situation of the Higher Education Institutions with regard to The Teaching Quality in HER 2016, 2017, and 2018 according to the National Institutional External Criteria (NIEC)?

The reviewers reviewed the content for SLTE in HER 2016 together. They scored and made the situation determination by working on the content for SLTE in HER 2017 and

2018 separately. Table 3 includes the scoring and explanation concerning NIEC. The numeric data indicates the extent to which the content for SLTE in HER meets the NIEC criteria. Besides, the determinations for the quality teaching in the institutions concerning each criterion are contained. The criteria for "student centered educational practices", "academic staff' teaching competency" and "training for trainers" were examined in all of the reports. It was understood that the criteria did not completely match up the issues dealt in the reports. It was confirmed that the student centered teaching not practiced in most institutions and the academicians' teaching competency should be developed. It was found with regard to the NIEC criteria that the level of quality teaching in the institutions was low.

Table 3.

The Situation of the Turkish Universities Concerning the Quality Teaching in HER based on the Content for SLTE in the National Institutional External Criteria (NIEC

	NIEC Criteria	HER 2016 Quantitative-Qualitative		R₁	R₂	R₃	M	HER 2017 Qualitative	R₁	R₂	R₃	M	HER 2018 Qualitative	Qua. M	Overall Qualitative
1	The teaching practices conducted in the institutions	n/a (no data)	0	1	0	0	0	n/a	0	0	0	0	n/a	0	The content for the introduction for teaching practices concerning the SLTE was not found.
2	Student centered educational practices	The strategies supporting active learning should be commonly used.	2	2	2	3	2	Only 4 % of the institutions embrace student-centered education approach.	2	3	3	3	The student-centered education processes have not been matured in 77% of the institutions.	2	Most of the institutions cannot implement student-centered education.
3	Questionnaires involving students' feedback	n/a	0	2	0	0	1	Insufficient data.	1	0	0	0	Insufficient data.	0	n/a
4	Academicians' competency for student-centered education	The teachers need to implement teaching practices to enable students to learn actively.	2	1	2	1	1	The teachers need to implement teaching practices to enable students to learn actively.	1	2	2	2	More focus should be placed on teaching staff's competency and active learning issues.	2	The teaching practices that enable students to participate in active learning have not been matured in most institutions.
5	The practices concerning student-centered education approach in the curriculum for training for trainers	The curriculum for training for trainers should be improved concerning period, content and practices.	2	1	2	2	2	It is necessary to update the curriculum for trainers and academicians' course content concerning teaching and learning.	3	2	3	3	The qualified academician is the strength of the institutions. However, the curriculum for trainers and instructors' teaching skills should be developed.	2	The curriculum for training for trainers and their teaching skills should be developed.
6	The use of professional practices, exchange programs, internships and projects in the evaluation of student workload.	A standard for students' professional practices should be constituted.	3	3	3	2	3	Course hours, assignments, practice, presentations and projects should be considered to evaluate students' workload.	1	0	0	0	n/a	2	Various teaching activities should be used to determine students' workload.
	Overall	The content moderately met NIEC 9 out of 18.		10	9	8	9	The content moderately met NIEC 9 out of 18.	8	7	8	8	The content moderately met NIEC 8 out of 18.	9	The institutions cannot met the expectations with regard to NIEC and their teaching quality is low.

What is the Current Situation of the Higher Education Institutions with regard to the Teaching Quality in HER 2016, 2017, and 2018 according to the International Standards (ESG)?

Table 4 indicates the consideration of the ESG criteria in HERs and the situation of the quality teaching in the institutions with regard to these criteria. According to the data in Table 4, the content for SLTE provided detailed explanation with regard to the ESG criteria at a low level. The content for SLTE was at a low level to provide detailed explanation concerning the ESG criteria. It was revealed that the institutions' quality teaching in relation to the ESG criteria is low.

What is the Current Situation of the Higher Education Institutions with regard to the Quality Teaching in HER 2016, 2017, and 2018 according to the Quality Indicators in the Literature (QIL)?

The content for SLTE in HERs was compared with QIL and the derived findings were displayed in Table 5. According to the data in Table 5, the content for SLTE provided the detailed explanation with regard to the QIL criteria at a low level. Any explanation for the students' perceptions for the teaching and learning activities to make teaching more effective was not found. It is understood that the quality teaching for "physical infrastructure and learning sources" and "the communication between students and academicians and classroom environment" was at a good level. However, the institutions still encounter various problems, including a rich diversity of teaching to meet the students' needs and expectations, putting conceptual and theoretical knowledge into effect. It can be stated that the quality teaching of the institutions with regard to the QIL was low.

In which Dimensions were the Developments and Matters Identified in Higher Education Concerning the Quality Teaching in 2016, 2017, and 2018?

It was found that awareness for "quality culture" had increased by years. For instance, it was explained in HER 2016 that half of the institutions did not have a sufficient understanding about internal evaluation process and quality culture (THEQC, 2017, 7). It was indicated in HER 2017 that most of the higher education institutions comprehended the internal evaluation and quality cultures processes, but needed to improve reporting (THEQC, 2018, 8). It was emphasized that the training for trainers and the students' awareness were crucial to conduct learning-based active teaching activities. A perception change had occurred in the function for assessment-evaluation by years. This change in the assessment-evaluation was to enable students to learn and develop rather than grade students' work. Another change was concerned with students' roles. That is, they developed themselves through the elective courses from a variety of disciplines.

Table 4.

The Current Situation of the Higher Education Institutions with regard to the Quality Teaching in HER 2016, 2017, and 2018 according to the International Standards (ESG)

	ESG Criteria		To what extent the documents meet the criteria													
			HER 2016	HER 2017							HER 2016					Overall
			Quantitative-Qualitative	Quantitative				Qualitative	Quantitative				Qualitative	Quantitative	Qualitative
				R_1	R_2	R_3	M		R_1	R_2	R_3	M		M	
1	Students'	1	Adopting	1	1	1	1	Student-centered	3	1	2	2	Student-centered	1	Most of the

#	Statement												
	needs and differences should be met through flexible learning channels.	student-centered education						education should be used.				education processes were not matured in 77 % of the institutions.		institutions do not provide a teaching appealing to students' needs and differences.
2	Different and effective teaching styles and pedagogical methods should be used.	The strategies supporting active learning should be used.	1	1	1	1	1	Different learning strategies should be used.	3	2	1	2	Defining the process to use student centered active learning methods is open to improvement.	1	Effective teaching styles have not been commonly used yet.
3	Pedagogical methods should be regularly adapted and reviewed to make teaching effective.	n/a	0	0	2	0	1	n/a	0	0	0	0	n/a	0	n/a
4	Students should be directed and encouraged to undertake their responsibility in their learning.	n/a	0	0	0	2	1	Only 6 % of the institutions had awareness for learning based teaching.	0	0	0	0	Students should have an active part in learning process.	0	Students' awareness for their learning should be raised.
5	Mutual respect should be ensured in student-teacher relationship.	n/a	0	0	0	0	0	n/a	1	1	2	1	Positive teacher-student relationship is strength of the institutions.	0	Positive data available to set up and sustain positive environments concerning student-teacher relationships.
6	A mechanism should be formed to deal with students' complaints.	Improving consultancy service	1	0	2	0	1	Insufficient data.	0	1	1	1	Consultancy service is strength of the institutions.	1	Consultancy service should be effectively used.
7	Evaluators (teachers) should develop their assessment - evaluation skills.	The curriculum for the training for trainers regarding period, content and practice should be improved.	2	2	2	1	2	The teachers' assessment-evaluation practices should be developed.	2	0	1	1	The academicians should use student-centered evaluation approaches in their lessons.	2	A professional development mechanism is not functional in the institutions to develop assessment-evaluation skills.
8	Students should be announced the evaluation criteria beforehand.	n/a	0	0	0	0	0	n/a	0	0	0	0	n/a	0	Data is needed to announce the evaluation criteria to students beforehand.
9	Evaluation should include information to what extent students acquire the targeted learning and guide them how they learn better.	Tracking the acquisition of the competencies.	3	1	1	1	1	More than half of the institutions (56%) did not track access to the competencies in the programs.	2	3	2	2	Determining access to the competencies in the programs is the strength of the institutions.	2	The institutions need to guide students to make learning better.
10	If it is possible, more than one evaluator should be involved.	n/a	0	0	0	0	0	n/a	0	0	0	0	n/a	0	The reliability and validity of the assessment - evaluation application should be ensured. Insufficient data.
11	Arrangements should be made to decrease the negative effects of evaluation.	n/a	0	0	0	0	0	n/a	0	0	0	0	n/a	0	Insufficient data how to deal with the negative effects of evaluation.
12	Assessment - evaluation should be fairly conducted to all students according to the processes which are determined beforehand.	Forming an effective, fair and transparent evaluation system.	2	0	2	2	1	Only 33% of the institutions met the expectation with regard to an effective, fair and transparent evaluation system.	1	0	1	1	The academicians should use student-centered evaluation approaches.	1	Conducting assessment-evaluation according to the processes which are determined beforehand is open to improvement.
13	An official process should be described to deal with the students'	n/a	0	0	0	0	0	n/a	0	0	0	0	n/a	0	n/a

	complaints.											
Overall	The content met the ESG criteria 10 out of 39 at a low level.	5	11	8	9	The content met the ESG criteria nine out of 39 at a low level.	12	8	10	10	The content met the ESG criteria 10 out of 39 at a low level.	10	The ESG criteria are not met and the quality teaching is low.

Table 5.

The Current Situation of the Higher Education Institutions with regard to the Teaching Quality in HER 2016, 2017, and 2018 according to the Quality Indicators in the Literature (QIL)

	QIL Criteria	HER 2016	HER 2017										HER 2016		Overall	
		Quantitative-Qualitative	Quantitative				Qualitative		Quantitative				Qualitative	Quantitative	Qualitative	
			R_1	R_2	R_3	M		R_1		R_2	R_3	M		M		
1	Equipment for learning center sufficient to enable students to learn.	0 n/a	0	0	0	0	n/a	2	3	3	3		The facility and infrastructure are strengths of the institutions.	1	The physical infrastructure and learning resources should be evaluated considering the students' perceptions.	
2	Students should know evaluation criteria in the assessment of learning objectives beforehand.	1 There are still problems to easily access to course information package.	0	0	0	0	n/a	0	0	0	0		n/a	0	The data concerning students' access to course information package is needed.	
3	Communication with academicians is easily made, support from them is received and a positive classroom environment is created.	1 The consultancy service for students should be developed.	1	2	1	1	The scope of the consultancy should be extended. Only 30 % of the institutions met the expectation is this issue.	1	3	2	2		Teacher-student relationship and interaction are positive.	1	The positive relationships between students and academicians are the strength of the institutions.	
4	All students participate in teaching.	1 Academicians should commonly use active learning strategies.	1	1	2	1	Active learning strategies should be commonly used.	2	1	1	1		The processes for student centered SLTE criterion should be improved.	1	Teaching practices which enable students to learn should be commonly implemented.	
5	A variety of teaching methods are used to facilitate students' learning.	1 Most institutions could not meet the expectation to adopt a student-centered education approach.	2	2	2	2	Only 4 % of the institutions met the expectation concerning student centered education approach.	2	1	1	1		The description for the use of student centered active learning method is open to improvement.	1	Few institutions provide rich diversity of methods in teaching.	
6	Conceptual and theoretical knowledge are put into effect to ensure students' learning.	1 There are still problems to standardize professional practices.	2	1	1	1	The strategies ensuring active learning should be used.	1	0	1	1		Students should be involved actively in learning processes.	1	Insufficient data.	
7	Feedbacks are sufficient to facilitate students' learning.	0 n/a	0	0	1	1	Only 25 % of the institutions met the expectation to track students' competencies.	0	0	0	0		Academicians should use student centered evaluation approaches.	0	Insufficient data.	
8	Students' high order skills should be developed.	2 The students should acquire the 21st century skills.	3	3	3	3	In addition to the professional competencies, there are problems to enable students to acquire the 21st century skills.	2	3	2	2		The mechanism should be run to ensure students to acquire the 21st-century skills.	2	The institutions have problems to make their students acquire the 21st century skills.	
9	What are taught in lessons meets students' needs and	1 The elective courses did not meet students' expectations.	0	1	0	0	n/a	0	0	0	0		The determination of acquisition of the program competencies is open to	0	Education should be arranged according to students' expectations and needs.	

No	Criterion																
	expectations.													improvement.			
10	There is a balance between assessment-evaluation and teaching.	There are problems to use the evaluation systems based on the learning outputs.	1	0	1	1	1	Only 14 % of the institutions met the expectation to use the evaluation systems based on the learning outputs.	1	1	2	3	2	The balance among learning outputs, student workload, learning-teaching practices and assessment-evaluation should be made.	1	The relationship between the learning outputs and assessment-evaluation is open to improvement.
11	In addition to paper and pencil tests, evaluation instruments such as group performances, project reports and portfolios are used.	There are problems to create an effective, fair and transparent evaluation system.	1	1	1	1	1	Only 33 % of the institutions met the expectation to create an effective, fair and transparent evaluation system.	1	1	1	1	1	Student centered evaluation applications should be commonly used.	1	Data is needed.
12	Assessment-evaluation results are used to improve students' learning.	Assessment-evaluation results are needed to improve students' learning.	1	0	1	0	0	n/a	1	1	1	1		n/a	1	Assessment-evaluation results are needed to improve students' learning.
13	Students' perceptions for learning-teaching activities are determined and used to make teaching more effective.	n/a	0	0	0	0	0	n/a		0	0	0	0	n/a	0	Data is needed.
Overall	The content met the QIL criteria 11 out of 39 at a low level.	10	13	12	11			The content met the QIL criteria 11 out of 39 at a low level.	13	15	15	14		The content met the QIL criteria 14 out of 39 at a low level.	12	The QIL criteria are not met and the quality teaching was low.

Discussion and Conclusion

In this study, the external evaluation reports of THEQC were examined according to the national, international, and the literature quality indicators. The results, which included the examination almost half of the Turkish higher education system based on the reports, are important to improve the quality teaching in higher education at the national and international levels.

This study's results can be grouped under two categories "reporting style" and "situation of the institutions concerning SLTE". The reports were prepared based on the interviews conducted with the people on site-visits instead of attendance to lessons. Although it is a complex situation to make classroom observations in higher education institutions (Gunn, 2018), it contributes to determining the current reality. The reports' roles are naturally limited to providing detailed and valid data concerning teaching quality in the Turkish higher education institutions (THEQC, 2017, 8). Furthermore, the standardization for the reports' style and language has not been adjusted yet. The reports' preparation according to a certain standard regarding the style and language in the following years will be more functional to track the changes and developments occur in the institutions. To illustrate, one of the following expressions *"student centered"*, *"active learning"* and *"learning based teaching"* should be chosen to ensure a holistic conceptual component. A criterion reporting language has been preferred and the "evaluation" approach has been abandoned in the reports by years. However,

this change approach disables the functions of HERs. It weakens the opportunity to *improve process*, which is the core of the quality culture (Elken & Stensaker, 2018). Therefore, HERs should reveal the current reality qualitatively and quantitatively to develop a quality of culture. This matter was confirmed by Akar and Babadoğan (2018). They think that the reports do not reflect the present reality. It was found in the studies that the external evaluations should be conducted objectively and independently to ensure reporting to reflect the current reality (Gumus, 2018; Kaya, 2017).

In addition to the reporting style, there is a functionality of criteria. In the *student centered learning-teaching-evaluation* sub-dimension determined by THEQC (2016), NIEC neglects the *process* and *outcome* dimensions of quality teaching. In terms of the *input* dimension, class attendance, taking examination, graduation conditions, consultancy, internship, mobility, continuing education center, and the legal regulations concerning deriving students' perceptions were confirmed to be quality indicators. These factors specified in the legal regulations do not mean that they are conducted. To illustrate, the student-centered education criter*ion in institutional policy* cannot be an indicator for quality teaching. What matters is that this policy should be put into effect. These sorts of indicators do not depict quality teaching's current situation and do not serve to develop student-centered education. According to Stensaker and Leiber (2015), the evaluations, which can reveal more details, can contribute to developing quality. In this regard, Wang et al. (2018) assert that general evaluations do not make teaching more quality. Deriving data concerning the process and outcome dimensions and making decisions on the data can provide a higher quality service in higher education. The reports including data for process and outcome dimensions can create a more functional mechanism to improve quality teaching. For instance, some indicators such as the use of different and effective teaching styles and the pedagogical results of these teaching styles can be included in the process dimension. The most problematic areas determined in this study include "lack of mechanism to improve the situation to acquire competencies", "not being able to use assessment-evaluation to make students learn better", "lack of effective and various educational activities to meet students' needs and expectations", and "academicians' not being able to constantly increase their teaching competencies". These areas are crucial to develop quality teaching (Gunn, 2018; Hénard, 2010; Ustunluoglu, 2017). The most important quality indicator the students perceive is concerned with academicians' skills to teach (Wang, et al., 2018). In this regard, the initiatives, which will be implemented to develop academicians' pedagogical aspects, can serve to improve quality teaching and universities' quality, respectively.

The situation of the Turkish higher education with regard to SLTE was described with NIEC, ESG, and QIL. The NIEC in the reports were considered at a moderate level. The ESG and QIL criteria were considered at a low level. It is necessary to arrange the national criteria in accordance with the international ones. The quality teaching indicators can develop student centered learning-teaching and evaluation in the form of THEQC institutional external evaluation (Dicker, et. al., 2019; Gunn, 2018; Hénard,

2010; Ustunluoglu, 2017). In conclusion, the Turkish higher education system meets the SLTE criteria at a low level.

It was found that the physical infrastructure, qualities of human resource, consultancy, and positive environment were the strengths of the institutions. However, it was revealed that these aspects cannot be functionally and effectively used to enable students to acquire the necessary skills in real life. Similar result was emphasized by Ustunluoglu (2016, 2017). The reports conducted by Hénard (2010) highlight that universities should put more effort into developing quality teaching, with an emphasis on pedagogy enhancement, support for student learning, and continuing education for faculty members. Professional development activities that are aligned with the institutional framework will promote a faculty culture and response that will influence student learning (Bollman, 2001). Besides, the need to develop trainers' teaching skills was identified. In this regard, the academicians think that it is extremely difficult to provide quality teaching and learning service which will meet the conditions changing constantly (Dicker et. al., 2019). Thus, administrative efforts should be directed at improving the teaching environment, including selecting the appropriate teaching staff or providing the necessary resources to this staff to be able to actuate as expected by students, and applying the appropriate teaching methods to each particular environment (Pedro, et al., 2018). It was revealed in the reports that the students' perceptions were rarely considered to develop teaching. This issue is discussed with regard to its function, validity and reliability (Gunn, 2018; Hénard, 2010; Ustunluoglu, 2017) and regarded as an activity not to serve to develop teaching (Wang, et al., 2018).

The current situation of Turkish higher education with regard to SLTE was examined by years and the tendencies were revealed. It was observed that there have been increasing tendencies for *awareness for quality culture* and the *requirement to constantly update the curricula of higher education*. The active teaching based learning grows in importance. It was determined that the *pedagogical expertise based student learning* is open to improvement. However, the most problematic issue is *training for trainers*. It becomes prominent that students should be actively involved in their learning and development. It can be deduced that the real function of assessment-evaluation in the students' learning is recognized by years. On the other hand, *tracking the acquisitions for the competencies* decreases in importance.

In this study, interactive deficits in the production of HER were revealed. The incompatibility of the national criteria with the international criteria was indicated in the external evaluations. The process indicators, which were neglected in the external evaluation, decreased HER's functions. It was confirmed in the reports that the concrete, physical, and quantitative elements were strengths of the institutions. However, they are open to improvement for functional use. Learning based SLTE means having philosophical bases and authentic practices requiring higher order knowledge and skill. The improvement initiatives for this type of learning should be conducted consciously, constantly, gradually, and in a planned way (Dicker et al., 2019; Hénard, 2010; Joshi,

2017). In this regard, the Turkish higher education institutions are in the transition from complementing administrative official regulations to implementing the legal regulations. Akar and Babadogan (2018) explain this fact as administrative awareness not to be conveyed students and academicians yet. The effect of the quality assurance system, which is conducted to improve the higher education system processes, does not have persuasive results (Bollman, 2001, Joshi, 2017). There are radical differences among the higher education institutions and departments to implement quality culture in an internalized way.

Implementation

In line with the results, an interactive model, which can shape quality teaching practices, was developed (Figure 2). In the current implementation to enable students to acquire the competencies, the institutional and individual performances are not subject to any incentive mechanism. This negatively affects quality teaching (Gunn, 2018). A system for accountability and incentive, which can increase the institutions and academicians' sensitivity, should be formed to develop students' learning. It is crucial to determine the extent to which the competencies are acquired through objective, independent, valid, and reliable assessment-evaluation systems. External audit should be ensured to undertake a function to make students gain competencies. According to Hénard (2010), institutions may implement evaluation mechanisms in order to identify and promote good teaching practices. Institutions should seek the ways of rewarding teachers who are committed to quality teaching. The need to form a similar model was emphasized by Wang, et al. (2018). They think that Chinese HEIs must form a standardized and comprehensive student assessment system on the basis of national incentives and institutional autonomy. To develop the Turkish higher education system, the national external evaluation criteria should be improved, considering the international criteria on this issue.
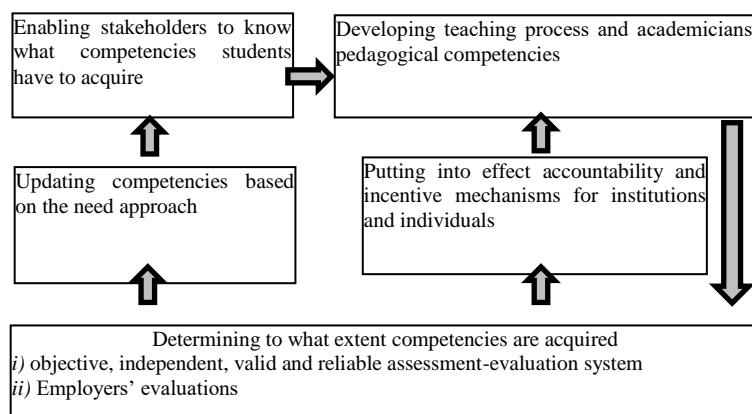
Figure 2. A model to develop quality teaching

Limitations and Suggestions

As the primary data source of this study consisted of HER report, its content constitutes a natural limitation. Another limitation is concerned with the instrument. It was

developed based on the literature. This study focused on the quality teaching in higher education. In this regard, the quality of distance education could be examined. Besides, HER could be examined with regard to administrative quality and research quality in further studies.

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Inclusive Leadership and Counseling in Schools: Asylum Seekers Students[*]

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Abstract: This is a multiple case study and aimed to examine school administrators' and and psychological counselors' inclusive activities for refugee students in schools. In the study, a semi-structured interview form was used to gather the data, and analyzed with the comparative situation analysis method. With the analysis of the responses given during the face-to-face interviews conducted with school administrators and psychological counselors, the data acquired related to the inclusive activities of school administrators and psychological counselors were collected under two categories: a) Inclusive views of school administrators on refugee students and b) Inclusive views of psychological counselors on refugee students. This study's findings revealed thatrefugee students have security anxiety due to war, conflict, and violent environments and face academic failures and difficulties in establishing healthy dialogues due to language problems. The participants stated that they could not establish communication with most refugee students' families and had limited information about their life outside school. Considering the results of the study; it can be recommended to create an information network at schools containing all experiences, educational experiences, familial status, and financial losses faced by refugee students before, during, and after immigration.

Keywords: Inclusive education, leadership, psychological counselor, asylum seeker students

Introduction

School administrators and psychological counselors who keep in touch with all stakeholders at schools, mainly undertake the mission of gathering these stakeholders around specific goals. The stated mission includes facilitating children's intellectual and personal development, ensuring social balance, and designing spaces based on cultural characteristics. Inclusive education, which focuses on cultural diversity and characteristics, is also a tool that prioritizes children's social, cultural, and emotional experiences (Bornman & Rose, 2010). The use of diversity in schools and the potential based on this, or the elimination of the barriers that arise, is largely based on understanding effective leadership in schools. Effective leadership in schools includes stakeholdersall stakeholders' inclusion and their involvement in all decisions affecting the school (Pugh, Every, & Hattam, 2012). Active, fair, and inclusive leaders in schools are also responsible for creating multi-purpose learning environments and solving the problems based on this (Ainscow & Sandill, 2010; Waldron, McLeskey, & Redd, 2011; Cosier, Causton-Theoharis, & Theoharis, 2013; Causton-Theoharis. and Kasa, 2011; Lewis, 2016).

It is seen that the objects attributed to inclusive leadership in schools are to ensure social justice, to ensure the full participation of all stakeholders, and to create inclusive learning environments (Lewis, 2016). Schools, which reflect the diversity based on the political, social, cultural, and economic dynamics that are imposed today, are places where inclusive leadership has become essential. One of the important causes and effects that increase this diversity is the intense migration experienced. The phenomenon of refugees and asylum seekers, which is one of the important consequences of these migrations, has given the school the mission of being prepared for diverse perspectives and putting them into practice (Fazel, Reed, Panter-brick and Stein, 2012; Rousseau, Drapeau, & Platt, 2004; Sujoldzic, Peternel, Kulenovic and Terzic, 2006).

Schools that are unable to turn the immigrations into an opportunity substantially face learning difficulties, negative attitudes, maltreatments, unprepared teachers, standard evaluations, and lack of parental participation (Schoolleidersregister PO, 2016). Schools that have managed to become structures that stabilize refugee and asylum seeker children's uneasy lives are places that manage to become learning spaces open to new interactions. Also, schools that facilitate these children's intellectual and personal development, try to achieve socio-economic balance, and share various cultural characteristics, are areas that approach being inclusive environments (Berry, 1997).

Today's education systems and schools adopt the concept of inclusive education, which is a response to diversity, and abandon the practice of educating disadvantaged groups by separating them from other students as in the past. In schools where diversity is embraced and brought to life, differences are accepted as a force (Education Queensland, 2005).

It is highly regarded that refugee and asylum seeker children's educational experiences, which is an important indicator of the diversity in schools, are used in solving the problems to be experienced in the inclusive education process (Legova, 2011; Reakes, 2007). The success rates of aid programs based on students' educational experiences, teaching-learning practices, the school's administrative structure, and changes in the education program are high (Dijkshoorn, 2016). In addition to all these dynamics, it should not be forgotten that psychological counseling staff to be assigned in schools and partnerships to be established with other institutions are also therapeutic services for students (Beirens, Mason, Spicer, Hughes, & Hek, 2006; Block, Cross, Riggs, & Gibbs, 2014; Hughes & Beirens, 2007; Pugh, Every and Hattam, 2012; Sidhu and Taylor, 2009; Taylor and Sidhu, 2012).

Surveys such as that conducted by McBrien (2005) have shown that the loss of family members, violent incidents, and memories of those left behind affect children's mental and psychological state cause traumatic reactions In addition to the pre-migration experiences of these children, there are frequent cases of companion, racial conflict, post-migration violence, loss of parents or single-parent care, insecure asylum environments, and insufficient financial support (Fazel, Reed, Panther-brick, and Stein. , 2012; Wilson, Murtaza, & Shakya, 2010). Due to all these, it should not be forgotten that these children have and will have seriously problematic behaviors and low academic achievements (Strekalova & Hoot, 2008). To alleviate and solve these problems, it is stated that the support to be given to parents, raising awareness of peers, and establishing healthy communication with them will be in favor of positive school experiences (Fazel Reed, Panter-brick, & Stein, 2012). Also, the vision of "quality education for all" expressed by the United Nations High Commissioner for Refugees (UNHCR) in its Education Strategy for the 2010-2012 academic year suggests that conscious and healthy relationships to be established between families and schools are vital for the solution of the problems experienced and to be experienced (UNHCR, 2012).

Although there were many researches about the children in need of special education, which is the emergence and focus of inclusive education, few of them focused on school administrators and psychological counselors working the refugee and asylum seeker students . So it is necessary to do deep research on administartors and counselors who will directly affect the integration of refugee and asylum seeker students, who are among the disadvantaged groups, to education environments (Billingsley & McLeskey, 2014).

Studies on inclusive leadership and counseling focused on social justice, cultural awareness, open-mindedness, emphasis on learning and classroom practices, collaboration, and shared leadership roles (Ryan, 2006; Devecchi & Nevin, 2010; Causton-Theoharis & Kasa, 2011; Mac Ruairc, Ottesen. and Precey, 2013; Causton & Theoharis, 2014). It is crucial to profoundly reveal school administrators and psychological counselors' inclusive activities aimed at refugee students whose number has reached millions at schools in Turkey. Depending on these purposes, the study

seeks to address the question, "What are the inclusive leadership and counseling approaches aimed at refugee students at schools?"

Method

Research Design

The qualitative research method was used to profoundly understand the inclusive activities of school administrators and psychological counselors. Discovering and understanding activities based on inclusive education are the main phenomenon of this research. Based on the nature of the main phenomenon (activities based on inclusive education), it was considered that it would be ideal to use qualitative methods in revealing complex details about emotions, thoughts, and feelings that are difficult to express or obtain in-depth information with classical methods (Strauss & Corbin, 1998).

The method used in the study was a multiple (collective) case studies. A multi-case study requires examining more than one case when examining a phenomenon, the universe, or general conditions of the research (Stake, 2000). Also, studies examining multiple situations are based on the argument that events do not have a single and unique truth (Miles & Huberman, 1994). Besides, the multi-case study method used in the research is thought to serve the purpose, as it describes the process and outputs for all situations in more detail.

Study Group

In this study, the snowball sampling method, which is among purposeful sampling methods, was used. This allowed to determine the inclusive activities of school administrators and psychological counselors in the school that places refugee students in the center, the effectiveness of their communication with other stakeholdersstakeholders, and their thoughts on the determination and solution of the problems related to academic success in school in a holistic manner (David, 1998; Nord, Brimhall, & West, 1997). This sampling method aimed to present a comparative analysis of school administrators and psychological counselors' opinions based on experiences and foresight in schools with refugee students of different ages, gender, class, country, culture, and socio-economic levels.

The following stages were used when choosing the participants: a) Sharing of participation materials with officials at the regional level b) Sharing participation materials with school administrators and psychological counselors in schools where refugee students are concentrated, and c) Selection of the most suitable school and participants after pre-interviews with volunteers in schools where research materials are shared.

After the participants were identified, the processes of distributing consent forms, obtaining approvals of the participants, and determining the schedule of face-to-face meetings were followed. It is believed that the participants' voluntary desire to participate in the research will positively affect the quality of the communication they have established with the researcher in the process and the sharing of their experiences regarding the research problem that the research focuses on. Following all these processes, the final participants comprised three school administrators and two psychological counselors in a secondary school in Aksaray. Participant names have been changed to pseudonyms. Detailed information for the participants are presented in Table 1 and Table 2.

Table 1.

Information about School Administrators

School Administrators' Pseudonyms	Position	Age	Year of Seniority	Previous Field	Year of Seniority in Previous Field	Year of Seniority regarding Refugee Students	Major Problems regarding Refugee Students in Past Years
Servet	School Principal	55	33	Classroom Teacher	12	10	Adaptation problems experienced by students from Syria, Iraq and Afghanistan
Abdullah	Vice-principal	53	30	Classroom Teacher	9	8	Financial difficulties and adaptation problems
Yasin	Vice-principal	40	17	Technology and Design Teacher	15	5	Communication and adaptation problems with refugee students and their families

Table 2.

Information about Psychological Counselors

Psychological Counselors' Pseudonyms	Age	Year of Seniority	Years of Experience with Refugee Students	Major Problems regarding Refugee Students in Past Years
Gül	45	20	5	Communication problems with refugee students and their families
Şefika	36	12	5	Multidimensional problems experienced; communication, the indifference of families, financial difficulties, and adaptation problems

Interviews

The data were collected through semi-structured interviews, which are considered a strong way to understand people. Face-to-face interviews were conducted in office rooms or psychological counseling rooms. The meetings were decided with the participants and scheduled in their school. The meetings lasted between 60 and 90

minutes. Interview questions focusing on inclusive leadership and counseling activities for refugee students are provided in Appendix 1 and Appendix 2. Each interview was recorded and written in detail, considering that it will facilitate the subsequent data analysis process.

The researcher conducted each interview. Five single-participant interviews consist of open-ended questions designed to examine participants' inclusive leadership and consulting activities. Guiding questions were also used during the interviews to elaborate and clarify the participants' answers.

Data Analysis

The inclusive activities of school administrators and psychological counselors are among the categories that emerge during the analysis of the relevant findings and interview data. Also, attention was paid to gathering information about the general situation of the participants at the school as data and reporting. The analysis process first started with analyzing the interview data and the determination of the categories. Categories for the participants' inclusive roles were determined as a result of multiple examinations and in-depth analysis of the data.

To examine each participant as a whole in their own category, the data of the interviews conducted with the participants was written and coded line by line and was subjected to the comparative case analysis method of Miles and Huberman (1994). In the following process, it was aimed to compare the codes revealed and to clarify them by defining them under specific categories. Also, the consistent comparison method was used to compare, rearrangement, and exclude the codes that enabled the emergence of different categories in the process (Charmaz, 2000). This coding process also ensured that the data were reviewed continuously, according to the participants' opinions. The process was continued until the final categories of the data were determined. The data were carefully examined through the cross-controlled coding process, and the coding has been tried to be understandable (Barbour, 2001).

Verifiability

Response validity (Creswell, 2002) and participant confirmation (Janesick, 2000) methods were used to confirm the findings. Details of the findings were provided to the participants via e-mail to confirm the validity of the answers. Participants were asked to clearly indicate which parts of the findings were in line with their own views and which were not. Besides, in the verification of the findings, the confirmation of the participants was used. With the participant's confirmation, it is also aimed to receive the participants' feedback for their direct quotations and their consent for the use of these quotations. Approvals of the accuracy, validity, and use of the summary of findings were obtained from all participants.

Limitations and Scope of the Study

Although the research was based on frequently used qualitative research methods, the validity of the findings has certain limitations. The study's main limitation is that it was based on the inclusive activities of school administrators and psychological counselors towards refugee students. The semi-structured interview form used in the study enabled an in-depth analysis of the participants' inclusive activities.

The study's secondary limitation is that long-term relationships with the participants were not established. Multiple interviews would be more ideal than a single meeting with each participant. However, the data obtained at the end of the research on the participants' inclusive activities and the participants' feedback on this made us think that the process should be further elaborated. Also, it was seen that the generalizability level of the findings of the study was limited by the nature of the participants. The findings of the study were based on five participants including the school administrators and psychological counselors in a city center. it was observed that the occupation, seniority, types of experience, age, their experiences with refugee students, and the contexts of the problems they have experienced varies. These reasons may have limited the generalizability of the study.

Findings

The interviews focus on the refugee students' general situation and participants' inclusive activities for these students. The importance of this study, regarding the integration of refugee students who migrated to Turkey for various reasons and whose number is increasing in schools, was also expressed by the participants. The categories determined to reveal the participants' views on inclusive leadership and counseling for refugee students were grouped under the following headings: a) School administrators' inclusive views towards refugee students, b) Psychological counselors' inclusive views towards refugee students.

Inclusive Views of Psychological Counselors on Refugee Students

It should be kept in mind that the number of refugee students at school is among the factors that affect and affect psychological counselors' inclusive activities. For this purpose, it is seen that the participants have different expressions about the number of refugee students, and it can be argued that this is due to the dual education (morning-noon) at school. Examples of the views of the psychological counselors on the subject are given:

> "Right now, we have eight refugee students who were in the afternoon group, my group (Gül)."

> "I am telling for the 7th and 8th grades, as a morning group student, we currently have four refugee students in our school (Sefika)."

It is among the expressions that refugee students' livelihood, communication with friends, and course success are negatively affected by the security problems they experience. In addition, the language problems these students experience limit their communication with the school components. Refugee students' reluctance to learn Turkish was attributed to the presence of these students in Turkey for a transition to a third country.

> "These students cannot speak Turkish very well, and their teachers say this over and over again. Students see themselves as guests here; According to them, there is no need to learn Turkish. For this reason, the Iraqi student establishes more friendship with the Iraqi and the Syrian student with the Syrian (Gul)."

It is among the statements that refugee students define themselves as foreigners and victims of war in the school environment and do not have a future goal. The belonging problems of refugee students and uncertainties regarding the future obscure their future goals.

> "These students always see themselves as foreigners at school. For example, I call them and talk in a warm environment, what do you think, what do you want to do about the future. They have no idea about the future (Gul)."

It is stated that refugee students do not have an incompatible and disturbing attitude in the school environment, but at the same time, they do not have an attempt to show themselves and be successful. It is also among the statements that it is not known what these students do outside of school due to the lack of communication with the refugee students' families. It can be said that these students only revealed their presence in school physically; that they were perceived as foreigners and thought they were foreigners affects their situation.

> "These students do not have adaptation at school, nor do they have disturbing behavior fighting and quarrels. They intimidate themselves. They say we exist as well, but we exist only as images, we exist as flesh (Gul)."

The statements that other teachers and students in the school value the refugee students and try to win them and do not perceive them as foreigners are striking. The fact that, students and teachers at the school are aware of the negativities experienced by the refugee students and their attempts to eliminate these negativities can be shown as an example of their efforts to win the refugee students.

> "I heard many times that Turkish students say, "We are trying to talk to them, we try to get them among us, if they have any needs we try to meet them." Some Turkish students even said, "We learned that this friend did not have breakfast, we bought something with our own money; we buy bagels, toast or whatever else they want." Some teachers share their dialogues with refugee students with me, and they are concerned about recruiting refugee students (Sefika)."

It is pointed out that most of the families of refugee students have never visited the school, and the school administration does not have home addresses and phone numbers that are necessary to communicate with these parents. It is among the expressions that healthy and continuous communication cannot be established with parents who are in contact with the school due to language problems. The lack of constant and healthy communication that cannot be established with the parents of

refugee students can be attributed to the priorities parents give to their children's education, economic inadequacies, and constant address changes.

> "The families of the refugee students in my school never come to school. Most of them don't even have addresses or phone numbers; we can't reach them in any way. We can only identify their homes if any students are living close to them (Gul)."

While the other stakeholders of the school want to help the refugee students and their families financially, since the refugees isolate themselves from society, there are negative perceptions arise about refugees among other stakeholders and the opinions that these individuals are temporary. Negative opinions about refugees can be attributed to the increase of these individuals' visibility everywhere, attribution of judicial cases in daily life to the actions of these individuals, and unfair generalizations for these individuals.

> "In general, when I look at the images of refugee students at school and in society, I think they are excluded. At first, people express their good intentions, but as the number of these people increases, they start to be seen everywhere, and some of these people become a beggar, some do other bad things, and they start to say that we were better without refugees (Sefika)."

The psychological counselors stated that in addition to focusing more on the detection and solution of negative events, they are also like a pillar that resists negativity. It can be considered that psychological counselors emphasize that they are in a supportive position for every shareholder in the school, based on the refugee students, who are expressed as vulnerable, in eliminating the problems encountered and conducting education-training activities more effectively.

> "We can think of my role in the school as the pillar and support of many problems and negativity, in terms of refugee students. Here, what the negativities are and their determination, the preparation of students for exams, application processes, or can be considered as our responsibilities towards teachers and administrators (Sefika)."

It was stated that the schools and classes where refugee students are located are not suitable for these students. It is also striking to note that these students' language problems not only negatively affect their academic achievement but also do not comply with the principle of equal opportunities in education. It can be stated that the biggest handicaps of refugee students from benefiting from the opportunities of inclusive education are language deficiency and the inequality of opportunities these students experience in every sense.

> "Before the child learns Turkish, the teacher tries to teach the Social Studies course, how can a person who does not speak Turkish understand the Social Studies course? In other words, the environment these children are in is inefficient. I think there is no environment for these students to be included in our school. Education and training should be based on equal opportunities and facilities, but while even this cannot be achieved, which coverage are you talking about? (Gul)."

Due to a large number of students and many problems experienced in the school, no separate planning could be made. It was also among the expressions that the communication problems, timidity, and unwillingness of the refugee students are among the obstacles for different planning. The student density in schools, the difference in student needs expressed as disadvantaged, the insufficient number of psychological counselors, and the lack of knowledge and experiences that can appeal

to all disadvantaged groups may also negatively affect all students' use of psychological counseling services.

> "In our school, separate planning can be made for refugee students, but it is really difficult at this stage because I have 400 students, and I cannot make separate planning for refugee students while I have 400 students. We encounter different problems at school. These are children of broken families, refugee students, children who experience violence, and different reactions from their families; these increase our work intensity (Sefika)."

In addition, the refugee students come from war and a complicated process, they try to resist the problems that have been borne by their immigration to a different country, making them like a snowdrop. It is noteworthy that despite the migration of refugees to different countries to get away from the problems they experience, they are faced with different and multiplied problems in the countries they migrate to. They have to be strong to overcome these problems, but at the same time, this situation makes them fragile; schools are one of the places where they cannot hide that they are very fragile.

> "The coverage of the refugee students in our school, when it was heavy stormy snow in the past, but when a snowdrop comes out of that snow, I compare these students to that snowdrop. You have to be strong it's snowing but you're also rare and fragile (Sefika)."

It was stated that there is a common understanding among the stakeholders in the school on the basis that each individual is respected, and the psychological counselors make efforts to establish and maintain this understanding. It should not be forgotten that this understanding has mostly settled between the refugee students and other students. However, the refugee students' timidity still stands as a major obstacle to the full settlement of this understanding. Language problems, problems of belonging, and dreams of transition to a third country may be the basis of the shyness experienced by refugee students.

> "The refugee students in our school are not the students who cause problems; they are intimidated and in the profile of "let me sit at the back of the class, don't interfere with me and just let me come and go". Actually, our students have accepted and recruited them, but refugee students are very shy (Gul)."

It was stated that refugee students are generally not exposed to disrespect and exclusion at school, are accepted at school and in the classroom, and refugee students who speak Turkish well are not even perceived as foreigners. Other students were informed about these students during the placement of refugee students in their classes. The fact that refugee students are not exposed to disrespect and exclusion at school can be attributed to stakeholdersall stakeholders' tolerant attitudes towards these students, and the excessive similarities shared with refugee students as language problems are solved.

> "I did not witness the problematic situations and moments of disrespect of the refugee students at the school. They are not problematic students anyway. I have never witnessed Turkish students disrespecting the refugee students either. On the contrary, Turkish students love these students very much. As I said, they do not exclude these students because they love them, and at the same time, the whole class does not want these students to isolate themselves (Gul)."

Inclusive Views of School Administrators on Refugee Students

The school where the administrators work is in a central location in the city and is the only school where dual education (morning-afternoon) takes place. In addition to the students' generally low socioeconomic level, it was stated that approximately 30 refugee students were from disadvantaged groups. In addition to being in the center of the city, the school where refugee students take place also has different variables through which all stakeholders of the school direct their energies. The expressed variables may negatively affect the planning and making an effort that puts them in the center.

> "This Secondary School is a school at the center of the Aksaray. Families at every socioeconomic level live around this school and constitute the school's target audience. According to our findings, there are more than 60 broken family children in our school whose parents live separately. Our school starts with the morning call to prayer and ends with the evening prayer. So it is a dual education school. Being in the center of the city, we are in a place open to all kinds of danger. We currently have around 30 Syrian, Iraqi, Iranian, and Somali refugee students in our school (Servet)."

The roles of the school principal and vice-principals in the school are subject to legal obligations, and they use the administrator or leader qualification depending on the conditions and the circumstances of the school principal. It was stated that school administrators do not have much administrative ability to act due to being stuck between legal obligations regarding their roles in school and the responsibilities assumed for sudden situations.

> "As a school principal, Am I an administrator or a leader in this school? This varies according to the situation and conditions. The Ministry of Education is a ministry that determines what an administrator and a teacher should do. But despite all this, my position at school is sometimes directed to being an administrator, generally a manager (Servet)."

School administrators state that refugee students are unwilling to participate in classes and games, and they point to communication problems as the reason for this. The fact that, these students are forced to work due to crowded families and their negative attitude towards school is among the main reasons for these students' absenteeism towards school. It was stated that these students preferred to sit alone in the back rows of the class or next to other refugee students. Also, it was stated that these students and their families prevent the practice of studying in different classes to eliminate the communication problems of these students. It can be considered that the economic inadequacies experienced by refugee students negatively affect their adaptation, attendance, and belonging to the school. Besides, preventing refugee students from separating from each other and participating in educational activities in different classes can be attributed to the fear experienced by these students and their families as strangers and prejudices against the inability to communicate by being alone.

> "When you observe the children playing at school from a distance, you can see that the refugee students are not participating in the games as in the classes. I mean, when I only look at the play and mischief of immigrant children with Turkish students, or when I look at the reports and complaints from teachers about them, I can see that these students are not without problems. Refugee students are extremely absent; how do you integrate them? (Servet)."

It was stated that there is no separate education plan for refugee students, but the teachers simplify the subjects so that these students can understand, and they allocate time for one-to-one education for these students., It was also stated that psychological counselors and other teachers collaborated regarding the situation of these students at school. Continuing the support provided at school for the social, psychological, and academic needs of refugee students under the school administration and teachers' initiative may make us think that the process is not success-oriented.

> "In our school, there is no separate planning for the refugee students, as our teachers say, but they try to facilitate lessons for these students, a little simpler, a little more without getting into the details. But of course, there is no obligation that teachers will take care of these students individually. So we do not have a different program; every teacher is trying to do all this conscientiously (Yasin)."

Volunteers among the refugee students are given duties in national celebrations, competitions, fairs, and festivals held at the school. It was stated that disputes between refugee students and Turkish students are resolved in active cooperation with psychological counselors, the school administration, and parents. It was also stated that the different cultural structures of refugee students affect how and to what extent the behaviors such as love, affection, etc., should be shown. It can be stated that the activation of refugee students in sports, arts, and cultural activities strengthens their bonds of belonging to society and school.

> "I believe that refugee students should be supported in social, cultural, and sports aspects. For example, we have Somali students playing on our school football team. Thanks to these students, our school football team is currently one of the teams with the highest number of cups in Aksaray. We give roles to these children in national celebrations, local liberation days, charities, or TÜBİTAK science fairs, science exhibitions, and other social activities that our school does (Abdullah)."

According to school administrators, inclusive education is like a halay dance (Anatolian folk dance) in which everybody holds the same rhythm to the same music, regardless of color, race, religion, or gender. It can be considered that from the expression of inclusive education among school administrators, the cultural codes of every society are effective, and the concepts related to these cultural codes differentiate the conceptualization of the inclusive education understanding.

> "I think inclusive education is like a Halay (Anatolian folk dance). In the "halay", everyone plays arm in arm. The halay, which I try to simulate for the inclusion of everyone in school, the fact that everybody goes arm in arm, and everyone dances to the same music with the same movements, regardless of economic, social, color, and gender, is an example of inclusive education for me (Servet)."

It was stated that although Somali students, one of the refugee students, are perceived differently due to their skin color, other refugee students are not perceived differently. It was stated that healthy dialogues based on respect, love, and mutual understanding occur at school in general. It can be stated that different perceptions about refugee students at school are based on students' physical characteristics; prejudices against individuals perceived as foreigners may be formed by different variables in the future.

> "Iraqis, Iranians, Afghans, etc., these students are very similar to our students with face types, but Somali students may be perceived differently because of their skin color. Students who don't know

each other come to our school from very different neighborhoods and villages. For this reason, the students in our school generally think that Syrian, Iraqi, and Afghan students are from here, so there is no different understanding against them in the first place (Servet)."

It was stated that there was no disrespect or exclusion in the school towards refugee students, and other students adopted these students in lessons and games after a certain period. It was also stated that teachers are making great efforts to win these students. The prevention of adversities that may occur at school against refugee students can be attributed to the school administration's fulfillment of legal obligations and the ability to persuade Turkish students to adhere to these obligations.

> "I witnessed something like this in our school, in the first terms; some Turkish students said we could not get along with them. The principal's response was, "Is this your father's property? This is a state school; these are the guests invited by the state to our country. If the state took this student here, this student will also study here; this is not your father's property." In other words, our response was to clearly show the facts to those who react by saying: "We don't want these here." When a clear message was given that "if they came to this country, received this right, and enrolled in this school, they would also benefit from this right," then there was no reaction came from the children (Yasin)."

It was stated that other stakeholders of the school admitted refugee students, and these students are not perceived as different from other students. It was stated that refugee students are also encouraged to participate in all activities addressed to the entire school and that these activities aim at cultural meetings, cohesion, and agreement. Organizing activities where refugee students can come together with all students and make equal use of the facilities available in the school can be regarded as a sincere step in achieving inclusive education.

> "In fact, as a person who sees all the problems of this school, I sincerely say this as a witness to all the parent, teacher, peer relationships, and play performances. We strive to provide these students with the opportunities given to each student without distinguishing them from our regular students (Servet)."

Discussion and Conclusion

The results obtained in order to reveal the views on inclusive leadership and counseling for refugee students in the schools were evaluated by comparing them with national and international studies. According to the results, it can be stated that both school administrators and psychological counselors focus on the solution of negative cases in the schools. It was often repeated that a large number of students in the school and communication problems with refugee students prevent them from planning for these students. Besides, it was stated that the classes in which refugee students are placed, prevent these students from participating in the education and training processes, which causes many problems from communication problems to course failures. These students' language problems limit their communication with other stakeholders in the school. Also, the unwillingness to learn Turkish in these children can be attributed to the fact that they stay in Turkey for a transition to a third country. These results are considered among the main causes of many negativities, from the refugee students'

mental health to their academic success due to social alienation, effects of stress due to resettlement sites, and multiplied effects of previous traumas (Correa-Velez et al., 2010).

The negative experiences of refugee students in the environments of war, conflict, and violence were among the main causes of psychological problems as well as security anxiety. Also, the stated problems cause these students to reduce their school presence only to physical existence and to be perceived as foreigners. In addition to what has been stated, both the immigration of these students to a new country and the adaptation problems they experience in this country increase these students' vulnerability. It is noteworthy that refugees' problems continue exponentially in the second countries, and schools are one of the places where refugee children cannot hide their fragility due to the problems they face. Depending on these results, studies are confirming that strong dialogues with refugee students and their families increase the self-esteem and self-confidence of these students to some extent (Birman, Trickett, & Buchanan, 2005; Quinton, 2013; Block et al., 2014). Also, the connections between home and school can be strengthened through communication offices to be established in schools and translators to be employed there (Block et al., 2014; Quinton, 2013). Besides all this, it is very difficult for schools to become inclusive places without largely solving problems such as difficulty in learning a new language by a refugee or asylum seeker students, adapting to a culture they are not familiar with, interruption of education, and the deterioration in family structures. It should not be forgotten that to alleviate all these negativities and to protect the mental health of these students, there is a need for psychological counselors and psychologists, who are experts in the field and who are familiar with the cultural codes of these students (Fazel et al., 2012).

Arguably the understanding of respect and tolerance adopted by all shareholders in the school and the classroom is reflected in concrete lives by taking care of each student without discrimination. The fact that refugee students were not exposed to disrespect and exclusion at school can be attributed to stakeholders' tolerant attitudes in the school towards these students, and the excessive similarities shared as the language problems of refugee students are solved. Related to these results, Kia-Keating and Ellis (2007) also demonstrated that a high level of belonging to the school and healthy dialogues to be established in these environments create an environment for a low level of depression and higher self-efficacy.

According to the results of the study, school administrations have no detailed information about refugee students, who will enroll in school or are already enrolled, and to prepare them for the future, there is no information about the characteristics, experiences, achievements, interests, and talents of these students. Also, refugee students' belonging problems and the uncertainties about their future obscure these students' future goals. Regarding these results, Taylor and Sidhu (2012) also demonstrated that a responsible, strong, and collaborative leader must provide the necessary support to the refugee students and coordinate the entire process. Numerous studies have revealed that the quality of leadership affects all school dimensions, guide

in creating an effective vision for the school and teaching-learning processes (Leithwood, Harris, & Hopkins, 2008; Leithwood & Riehl 2005; Reyes & Wagstaff, 2005). In addition, the importance of active and supportive leadership has been emphasized in the implementation of long-term inclusive policies for refugee and asylum seeker students to continue their education in a stable manner and to be employed in the future (Hamilton & Moore, 2004; Arnot & Pinson, 2005; Christie & Sidhu, 2002).

All participants emphasized that legal obligations determined the structure, effectiveness, and flexibility of their roles at school. School administrators refer to legal obligations and responsibilities assumed for sudden situations and express that their administrative ability is limited. Also, the prevention of negativities that may occur against refugee students in the school was attributed to the effectiveness of the school administration's legal obligations and the compliance of Turkish students with these obligations. Depending on these results, most educational institutions are not able to solve the problems of refugee students might be associated with the failure to carry the participative and inclusive understanding into action as an integrated model (Block et al., 2014). Also, the fact that politicians, educators, and researchers take into account the experiences and needs of refugee children affects the identification and support of their cognitive, social, and emotional development (Mistry, Biesanz, Chien, Howes, & Benner, 2008; Suarez-Orozco, Suarez-Orozco, & Todorova, 2007).

It may be argued that many psychological, sociological, and academic problems, from the language problems of refugee students to their inability to participate in school activities, can be solved with participatory and inclusive leadership in the school. Related to these results, secure and positive relationships with refugee and asylum seeker students are among the factors that directly affect participation and academic success (Komarraju, Musulkin, & Bhattacharya, 2010; Zengaro & Zengaro, 2016). In addition to these, the intercultural understanding that feeds refugee students' worthiness and sense of belonging should not be overlooked (Hek, 2005; Matthews, 2008; Rutter, 2006). Accordingly, meeting the cognitive, social, and emotional needs of these students may also facilitate their becoming active citizens by merging with a larger segment of the society (Isik-Ercan, 2012).

The fact that refugee families prevent attempts to distribute them to different classes to prevent refugee students from sitting in classrooms with their own nationalities or alone may indicate that the culture of consultation between shareholders in the school is not established. Continuous and healthy communication that cannot be established with the parents of refugee students can be attributed to parents' priority to their children's education, to economic inadequacies, and to constantly address changes. Also, the economic inadequacies negatively affect the adaptation, attendance, and belonging of these students.

The families of refugee students, which stand as an obstacle to love school and socialize with other students, are also among the main reasons why these students are employed on the streets and are often referred to as absentee students at school. Also,

the negative opinions about refugees can be attributed to the increase in these individuals' visibility everywhere, the fact that the judicial cases experienced in daily life are mostly tied to the actions of these individuals, and unfair generalizations made for these individuals. Studies in line with these results also emphasize that refugee students' education interruptions directly affect their adaptation to society and their acceptance as marginal (Humpage, 2001; McBrien, 2005). Also, the failure of refugee students in the fields of reading, mathematics, and science was attributed to their absenteeism and low graduation rates (OECD, 2006).

Although there was no separate planning for the refugee students in the school, it was stated that the teachers were directed by the school administrators to deal with the refugee students one-on-one during the remaining time of the lessons. Continuing the support provided at school for the social, psychological, and academic needs of refugee students under the school administration and teachers' initiative may suggest that the process is not success-oriented. Considering these results, schools can be considered not only a places that teach reading and writing, but also environments where the student learn participation, communication, social relationships, belonging, and discovers themselves and others (Matthews, 2008).

Directing refugee students to become participatory, responsible, and active individuals in school activities is an important goal that school administration, psychological counselors, and other teachers agree on. Psychological counselors, as well as other stakeholders, are in a supportive position for the refugee students, who are expressed as vulnerable, in reaching the determined goals, eliminating the problems encountered in the school, and carrying out education-training activities more effectively. In this context, inclusive leadership and the connections to be established with teachers and other shareholders are important for students' academic and cultural development (Karatzias, Chouliara, Power, & Swanson, 2006). Kanu (2008) argues that the reasons for the alienation that refugee students experience in schools were the continuous interruptions in education, inconsistent services, inadequate educational support, and the types of discrimination exhibited by school staff. Among the difficulties that refugee students faced, culture shock and socio-economic problems negatively affect them in school participation and becoming active individuals (Suarez-Orozco, M. Suarez-Orozco, & Todorova, 2008).

The definition of inclusive leadership, which will be implemented in schools, as everyone keeping the same rhythm to the same music without being subjected to color, religion, and gender discrimination, is an example that this type of leadership can be blended with cultural codes. Cultural codes of each society were effective in the expression of inclusive education among school administrators, and the concepts related to these cultural codes differentiate the conceptualization of the inclusive education understanding. Taylor and Sidhu (2012) describe inclusive education for refugee students as basing all dynamics in school on respect, love, and tolerance. Besides, schools that value inclusive and good practices need an inclusive leadership approach that actively supports refugee students' positive aspects and discourses. In

addition to all these, it should not be forgotten that in order to support refugee and asylum seeker students, prevent their exclusion, and ensure their psychological well-being, psychological counselors who are experts in their fields are required (Mujis et al., 2007).

It was stated that the special situations of refugee students were taken into account, and the school practices were based on respect, love, and understanding. In addition, it should be kept in mind that the density of students in schools, the difference in student needs, the insufficient number of psychological counselors, and the lack of knowledge and experiences that can address all disadvantaged groups also negatively affect the use of psychological counseling services for all students. It was stated that in cases where school belonging is felt at a high level in children and adolescents, self-esteem and motivation levels also increase (Kia-Keating & Ellis, 2007; Sujoldzic et al., 2006). Also, it was stated that education based on supportive understanding prioritizes enhancing the individual's resilience and potential as well as encouraging active participation and inclusion (Downey, 2007). It should not be forgotten that with the participation of refugee students and their families in all decision-making mechanisms in the school, the inclusiveness of official and latent programs at school will increase (Due, Riggs, & Augoustinos, 2016). Taylor and Sidhu (2012) also argue that targeted policies or program support for refugee students will increase inclusiveness, and a successful implementation process based on these will be established. In addition, cultural adaptation problems, poverty, bad housing, absenteeism towards school, and psychological problems are among the factors that make the implementation process difficult (Betancourt et al., 2015; Coll & Magnuson, 2014; Moinolnolki & Han, 2017). All these negativities mentioned were among the reasons for the problems related to participation and healthy social relations among refugee students, as well as interrupting the education life of refugee students (Porche, Fortuna, Lin, & Alegria, 2011; Watson, 2009).

It can be argued that the sharing of different experiences and cultures at school is important, and the best indicator of this is the cultural richness displayed at fairs or social activities held at the school for all students. It can be stated that the activation of refugee students in sports, arts, and cultural activities strengthens their bond of belonging to society and school. In addition, organizing activities where refugee students can come together with all students to increase their belonging to society and school and make equal use of all students from the facilities available in the school can be considered a sincere step in achieving the success of inclusive education. Regarding these results, it was stated that an inclusive understanding that addresses different cultures in schools has great contributions to students' adaptation processes (Amthor & Roxas, 2016). Also, teachers, administrators, and other school personnel associating the curriculum and the cultural context of the school with the cultural world of the students at home is an important component of the process (De Capua & Marshall, 2010; Gonzalez, Borders, Hines, Villalba, & Henderson, 2013; Morrison & Bryan, 2014). Besides all these, it is very important that orientation programs, parent workshops, and professional development programs for teachers in schools sensitive to

refugee students are stable and transformed into an institutional role (Rossiter & Rossiter, 2009; Xu, 2007).

Based on the results of the study, recommendations to researchers and practitioners are as follows: An information network can be created for refugees in schools, including all experiences before, during, and after migration, educational backgrounds, family situations, and financial losses. In schools, a communication network that is kept up-to-date with law enforcement officers' knowledge can be established for healthy and continuous communication with refugee students and their parents. Psychological counselors can be supported with the necessary training to be aware of the psychological, cultural, social, economic, and historical dynamics of refugee students and all disadvantaged groups and keep this knowledge up to date. This is an important issue for future research. Researchers in the field can conduct long-term observations that reveal how inclusive leadership and counseling processes for refugee students.

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Appendix-1

Interview Questions for Psychological Counselors

1. Can you explain your role in the school?

2. How many refugee children receive education in your school?

3. What are the refugee students' characteristics, compatibility status, communication levels with friends, and course success?

4. How do they define themselves?

5. How do they adapt to the environment at school and outside of school?

6. How do their friends and teachers see them?

7. How is school-family cooperation?

8. How are their images in society?

9. How do you contribute to inclusive education in your school, and what are your examples for this?

10. Do you make a separate plan for the education of refugee children in your school?

11. What do you think inclusive education looks like?

12. How do you improve mutual understanding in your school?

13. How did you react when you witnessed moments of disrespect or exclusion to the refugee students at your school, and what preventive measures did you take to prevent this from happening again? Could you please give some examples?

Appendix-2

Interview Questions for School Administrators

1. Can you explain your role in the school?

2. Can you tell us about your school?

3. How do you contribute to inclusive education in your school, and what are your examples for this?

4. Do you make any extra planning for the education of refugee children in your school?

5. What experiences do you have with the inclusion of refugee children in your school?

6. What does inclusive education look like to you?

7. How do you improve mutual understanding in your school?

8. How did you react when you witnessed moments of disrespect or exclusion of the refugee students in your school, and what preventive measures did you take to prevent this from happening again? Could you please give some examples of this?

9. How would you deal with the inclusion of different experiences, histories, or different cultural backgrounds in your school?

Preschool Inquiry-Based Mathematics in Practice: Perspectives of Teachers and Parents *

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Abstract: An Inquiry-Based Mathematics Activities Module (IBMAM) consisting of integrated and child-centered activities was developed. IBMAM provides preschoolers 60-72 months of age with the opportunity to develop mathematical and inquiry skills and use them actively to construct their own learning. The present study aims to investigate the effects of IBMAM on preschoolers. Teachers' and parents' views were obtained, and long-term observations (16 weeks) were performed. Phenomenology, which is a qualitative research design, was used in this study. The study sample consisted of a pre-school teacher of a kindergarten (Sincan, Ankara) and her children's parents in the academic year of 2016-2017. Semi-structured interviews were conducted with the teacher to assess the post-IBMAM process, changes in their views of math and math education, the effects of IBMAM on preschoolers' math skills and changes in the classroom. Preschoolers' parents' were also interviewed to evaluate changes in preschoolers at home. To support the results of the interviews, unattended and structured classroom observation was conducted twice a week for four months on certain dates. Instant field notes were taken during each observation, which was also videotaped. Data were analyzed using inductive content analysis. Results showed that IBMAM contributed to all areas of development by providing a fun and educational setting that increased preschoolers' motivation. In the observations, it was understood that the applied module gave pre-school children different perspectives, encouraged active participation, enabled learning to continue, and help enabled pre-school children to use their scientific process skills more frequently. Moreover, parents noticed positive changes in their children, and therefore, were optimistic about the future.

Keywords: Pre-school mathematics education, inquiry-based education, mathematical skills, parents, teachers

Introduction

Environment and resources can help children develop math skills on their own. In the early years of life, children discover mathematical facts through games. For example, they compare the number of fruits in plates or heights of block towers, discover patterns and create new patterns using real objects and sustain or extend them and detect and analyze their shapes or deal with real-life situations, such as sharing a bowl of biscuits with a playmate fairly (Seo & Ginsburg, 2004). Although such math education in natural settings is useful at early ages, it is still limited. Children need more than natural settings to learn math and abstract thinking better. In other words, children need systematic and developmental math education programs prepared by adults to help them develop math skills and learn math concepts (Lewis Presser et al., 2015). Suppose a math education system aims to help children understand the world and provide them with a solid foundation for success. In that case, it should encourage active engagement, facilitate the establishment of a link between prior knowledge and math, allow for deduction and inquiry through reasoning and development of comprehension skills (National Association for the Education of Young Children [NAEYC], 2002).

Developmental and cognitive theories suggest that early math skills are associated with academic achievement in the future (Anders & Rossbach 2015; Aunola et al., 2004; Clements et al., 2004; Gersten et al., 2009; Jordan et al., 2009). Basic math concepts (one to one correspondence relationship, grouping, comparison, counting, ordering, and making simple operations) develop in the preschool period. Math skills, therefore, play a critical role in academic achievement and professional career (Anders & Rossbach 2015; Clements & Sarama, 2005, 2014). Math skills developed in the preschool period provide children with a foundation for future academic achievement. Preschool math activities should teach basic skills that can be transformed into advanced math because they form the basis for additional life skills. Research highlights that early years are critical, especially for the development of math knowledge and skills (Gifford, 2004; Clements & Sarama, 2014). Experimental studies show that children who start primary school differ in math skills and that that difference increases during and even after school life (Anders et al., 2012; Sammons et al., 2004).

According to the National Council of Teachers of Mathematics [NCTM, 2000] and NAEYC (2002), quality and thought-provoking and accessible math education a vital role future learning of children aged 3-6 years. According to the NCTM (2000), a high-quality math education program requires self-confident and well-informed teachers, educational policies that encourage and enrich learning, ready-to-use education settings and objectives of equality and excellence. Children deserve and need the best possible math education. Children should experience effective, research-based curriculum and teaching practices, which require political and organizational support and adequate resources. Therefore, children develop math skills through

strategies and techniques integrated with rich resources, and those skills are the basis of other academic skills. Research shows that people who are good at math are more likely to be successful in other fields (Duncan et al., 2007; Geary, 2000).

Since it is an undeniable fact that children acquire math knowledge in the first six years of life through physical actions, games and materials, everyone involved in the education of preschoolers should know and apply the methods that encourage them to think, enquire, ask questions and explore. Events, experiences, discussions and questions play a big role in the development and enrichment of math skills (Clements, 2001; Moomaw, 2011; Umay, 2003; Unutkan, 2007). When children start questioning at early ages (0-6 years), they also start defining objects and events, asking questions, using current scientific knowledge to make and test explanations and communicating their opinions to others. Afterward, they define assumptions and consider alternative explanations when using critical and logical thinking skills. In this way, children actively use their thinking and reasoning skills to develop an understanding of math (National Research Counsil [NRC] & Mathematics Learning Study Committee [MLSC], 2001). Therefore, math programs with systematic activities should be used to provide children with the opportunity to develop and practice skills at school or home (Starkey et al., 2004). Inquiry-based math education is based on sense-making processes by interpreting events and situations (Clements, 2007). Many researchers argue that inquiry-based math education enables preschoolers to achieve in-depth conceptual learning, develop an understanding of mathematical processes and learn scientific inquiry processes (Katz, et al., 2014; NRC, 2004). In this study, an Inquiry-Based Mathematics Activities Module (IBMAM) consisting of integrated and child-centered activities was developed. IBMAM provides preschoolers 60-72 months of age with the opportunity to develop mathematical and inquiry skills and use them actively to construct their own learning. The present study aims to investigate the effects of IBMAM on preschoolers' math skills. To that end, a teacher's and her children's parents' views were obtained, and long-term observations were performed. Doing this, this study approached the same phenomenon from different perspectives and showed consistency in the results. The main question of this study is, "What is the relationship between interviews and observations regarding IBMAM activities? To this end, this study sought answers to the following sub-questions:

- What does "mathematics" mean to the teacher and parents?

- How do the teacher and parents think math education should be like?

- What kind of effects does the teacher think IBMAM has on preschoolers?

- What does the teacher think about changes in children?

- What are the data obtained from the observation?

- What kind of effects do parents think IBMAM has on preschoolers?

- What do parents think about changes in children?

Methodology

Design

Phenomenology, which is a qualitative research design, was used in this study. People's perceptions of the world originate from their sensory experiences of things and personal interpretations of those experiences. Phenomenological research deals with how we bring together the facts that we experience in understanding the environment (Patton, 2014). Phenomenology is a research design that aims to highlight perspectives, perceptions and experiences (Ersoy, 2016). Phenomenology was the design of choice in this study as it aims to have a better understanding of a teacher's and parents' views of a new module develop for preschool math education and interpret the relationship between activities and analyze changes in children's lives.

Participants

The study sample consisted of a preschool teacher of a kindergarten (Sincan, Ankara) and her children's parents in the academic year of 2016-2017. Participants were recruited using a purposive sampling technique, which is a non-probability sampling technique involving selecting participants who have experienced a specific phenomenon and meet certain inclusion criteria (Patton, 2014). Participants were recruited using criterion sampling. The basic concept of criterion sampling is to include appropriate situations according to predetermined criteria (Merriam, 2013; Yildirim & Simsek, 2012). The study sample consisted of the preschool teacher of the classroom in which IBMAM was administered and her children's voluntary parents. Parents were interviewed at three different times. There were 6, 8 and 12 participants in the first, second and third interviews, respectively. The teacher had a bachelor's degree and nine years of professional experience. The parents were all housewives and their age ranged from 27 to 43 years. Eight of them had a primary school degree, three a secondary school degree and one a high school degree.

Inquiry-Based Mathematics Activities Module (IBMAM)

The experimental group children performed the 30-activities IBMAM for three days a week for ten weeks. IBMAM consists of four sets of skills (arithmetic, numeracy, addition and subtraction) but focuses, especially on numbers and operations skills designed to be developed by activities prepared in an eclectic and spiral structure. Acquisitions and indicators were handled separately for each skill. "Initial Stage," "Initial Inquiries," "Saving the Problem," "First Remarks and Possible Answers/Solutions," "Method Selection," "Planning and Implementing Research,"

"Comparison of initial ideas and Results" and "Writing and Sharing through Mathematical Expressions" were used for each activity (Bayram, 2015). IBMAM was designed as a process that requires high-level thinking, organization and planning for both educators and children (please see for detailed knowledge about IBMAM; Karademir & Akman, 2017).

Data Collection

Data were collected using a semi-structured interview developed by the researcher and approved by experts. Data were supported by field observations and records. The aim of qualitative research in which phenomena (individual, process, activity, program, and environment and related themes are defined in detail through in-depth analysis using multi-source data collection tools (interviews, and observations (Creswell, 2012), is to highlight experiences and perceptions and meanings attached to them regarding a phenomenon or a case. Interviews provide people with the opportunity to express their behaviors, feelings and insights in their own words, which allows us to understand their world views, perspectives and experiences (Merriam, 2013; Patton, 2014). Observations help us obtain a comprehensive and longitudinal image of behaviors and phenomena in determined environments (Yildirim & Simsek, 2012).

All mathematic activities werperformed by the researcher during this study, and the teacher was in the classroom. Semi-structured interviews were conducted with the teacher to assess the post-IBMAM process, to determine changes in her views of math and math education, the effects of IBMAM on preschoolers' math skills and changes in the classroom. Preschoolers' parents' were also interviewed in three sessions to assess changes in their children at home. There were 6, 8 and 12 participants in the first, second and third sessions. It was made sure that the items were easy to understand, open-ended, unbiased, one-dimensional and logical (Merriam, 2013; Patton, 2014).

Observations were performed to support the results of the interview. Non-participant and structured classroom observations were conducted twice a week for four months on certain dates. Instant field notes were taken during each observation. Classroom observations were also videotaped, and each recording was repeatedly reviewed to enrich the field notes.

Data Analysis

Data were analyzed using inductive content analysis. To obtain a general idea for data encoding, all interview transcriptions and field observation notes were read several times and video recordings were examined again and again. Interview and observational data were coded in the light of the sub-objectives of this study. Sub-themes and themes were developed, and findings were defined and interpreted. For reliability, a third expert reviewed the codes and themes. Data were presented in table and figures after a consensus was reached.

Data were analyzed using inductive content analysis, which involves data categorization and theme and sub-theme development based on categories to understand the symbolic world of participants (Patton, 2014). Themes are associated, interpreted to make future predictions (Yildirim & Simsek, 2012). To have a general idea for data encoding, all interview transcriptions and field observation notes were read several times and video recordings were examined again and again. Interview and observational data were coded in the light of the sub-objectives of this study. All views and records thought to respond to the research question were combined under the same code. Sub-themes and themes were created from the codes. All themes and sub-themes were reviewed and those associated with each other were combined. Cites and codes in the sub-themes and codes were read to check their suitability for the codes, sub-themes and themes. Data were coded using QSR-NVivo 8.

Findings and Discussion

This study investigated the teacher's and parents' views on the effects of IBMAM on preschoolers' math skills and lives. This section will present the implementation process and its aftermath in all aspects and will provide in-depth interview analysis supported by observation and field records.

Teacher's and Parents' Views of Math

Pre and post-IBMAM in-depth interviews were conducted with Ceren (teacher) to elicit information on how she defined math, what kind of activities she used in her classroom and how her views changed after IBMAM (see Figure 1).
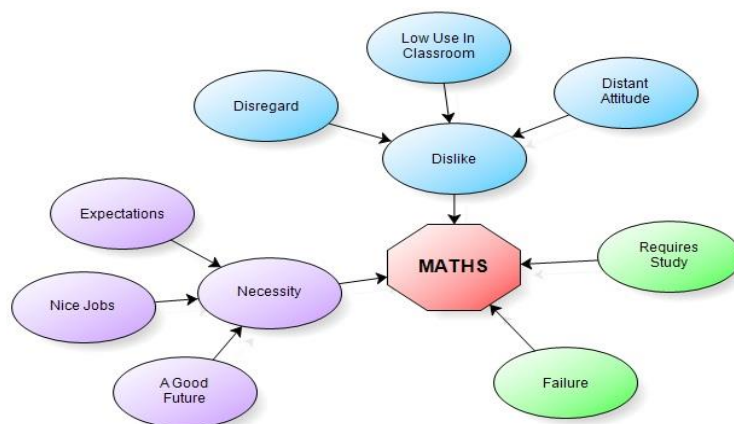
Figure 1. Opinions about maths

Ceren emphasized that math is an important branch of science in every field of life. She stated that she did not attach importance to math activities as other activities and associated her negative attitudes towards math with her negative experiences in the past. There are studies supporting this finding. The more negative the teachers' past

experiences with math, the fewer math activities they perform in their classrooms (Karakus, 2015). People continue to do what they love and succeed. Therefore, if children enjoy learning math, they develop a positive attitude towards it in the future (Aydin, 2009; Tarim & Bulut, 2006).

For parents, there are many reasons that make math important. Most parents stated that math is necessary for every sphere of life and children will need it throughout their lives. One of the parents stated that *"Math is important for my kid as well as a friend's kid. Math has an important place in our lives, in every sphere of our lives. We cannot afford not to know it. Every child needs to understand and use math"* In this way, she emphasized that math is in every aspect of life, that it is crucial for every child and that children should understand and use it. Another parent stated that *"School life is not just about here, these kids are going to go to different schools and have to use math there, so it is important"*, emphasizing that education is an ongoing process and that math is an important lesson in this process.

Another parent expressed her views on the importance of mathematics as *"My husband is a construction worker. There is no construction work in Ankara during this period, you know, we are in the winter. I mean, we work hard to make money. We couldn't go to school, so we want our daughter to get a proper education. We want her to learn math, science, Turkish etc., so that she would not have to work as hard as we do to make money,"* while another parent stated that *"If you want to have a good job, you have to know math."* These statements suggest that parents think that their children should learn math to avoid financial problems in the futureuggest that parents think that their children learn math to avoid financial problems and that having a decent job depends on math knowledge. Some parents stated that math is important as it helps children develop skills. One of them stated that *"knowing math is not only knowing the numbers, you have to use math at home, at the grocery store, in the market, that is, in life. You have to know how to do math and calculation and whatnot."* This mother drew attention to the that math is not only about numbers and that one has to use numbers and develop reasoning skills.

Parents think that math is important because *"it helps people have a higher income, it is in every sphere of life and it is needed at other educational levels."* Many studies are suggesting that developing math skills in early childhood improves math performance in advanced ages (Clements & Sarama, 2008; Celik & Kandir, 2013; Shophian, 2004; Starkey et al., 1999). There are also studies showing that there is a positive relationship between socio-economic status and math skills (Aslan & Aktas Arnas, 2015; Baroody & Lai, 2007; Baroody et al., 2008; Jordan et al., 2006; Kandir & Orcan, 2010). In general, research shows that qualified, child-centered and constructivist programs should be implemented to help economically disadvantaged people develop math skills. Our participants associated math knowledge with a better life and a higher income, which might be because they are socioeconomically disadvantaged parents. The literature and our results show that IBMAM can be used to fill the gap in children's math knowledge.

Parents stated that math education should make children love math and that math education should be simple and include toys. It is reported that children develop math skills through play in early childhood; therefore, researchers have focused on the issue in recent years (Fleer, 2009; Nayfeld et al., 2011; Yoon & Onchwari, 2006). Some researchers argue that play should be integrated into math activities because gamified math activities enable children to develop math skills in a fun and natural way (Clement & Sarama, 2005; Cohrssen et al., 2014; DeGoot, 2012; Sirin, 2011; Zaslow et al., 2010). The observations and the teacher's responses show that the gamified math activities in IBMAM increased children's interest and motivation for learning math.

Some parents also stated that mathematics content should be supported by daily life skills. One of them stated that "*math teachers used to scare us. We simply can't love it. We use it but only when we need it. They could actually have taught it in a simple way. Teachers should make sure that our kids learn to love math. I don't know; they could use toys or activities, I mean, they should somehow do it.*" With this statement, the parent emphasized that toys and activities should be integrated to make sure that children enjoy learning math. Another parent stated that "*It is only worth learning if you can use it in daily life. I mean, you should be able to use it at the grocery or on the bus,*" suggesting that math knowledge should be put into practice on a daily basis.

After IBMAM, Ceren was asked the question "*how should math education be?*" to which she responded as follows (see Figure 2):

After IBMAM, Ceren's views changed positively. She realized that classical math teaching approaches were not useful and therefore decided to use different methods. She also thought that children should be provided with math education integrated into daily life. Ryan and Laurent (2016) addressed the benefits of inquiry-based approaches to educators and reported results similar to ours. They stated that although educators had more responsibility, children were more willing to learn, ensuring smooth classroom management. Walker and Shore (2015) stated that inquiry-based approaches led to changes in roles and attitudes between educators and children, which made the latter more inquisitive and enthusiastic. Similarly, Vandermaas-Peeler and Pittard (2014) conducted a study of socioeconomically disadvantaged children four years of age and their parents and provided the latter with training on associating math with daily life, gamification and active use of mathematics at home. They concluded that training parents positively affected children's development of math skills. Our results showed that the gamified and rich activities of IBMAM helped children enjoy learning math and apply it to the home environment quickly.
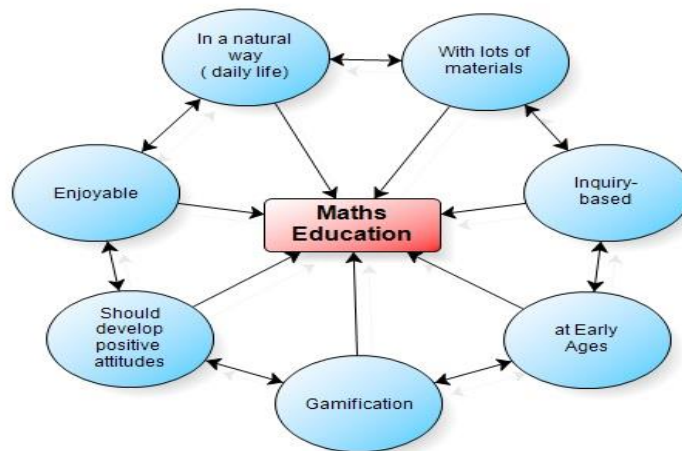
Figure 2. Maths education

Impact of IBMAM on Teacher

Ceren was asked to evaluate the IBMAM process in general. Her responses were grouped under the sub-themes as presented in Figure 3: "*creativity, material, relating with daily life, retention, the difference from other activities, attention, communication with children, classroom management, communication with parents, applicability, likes and dislikes, and reflections on children.*"
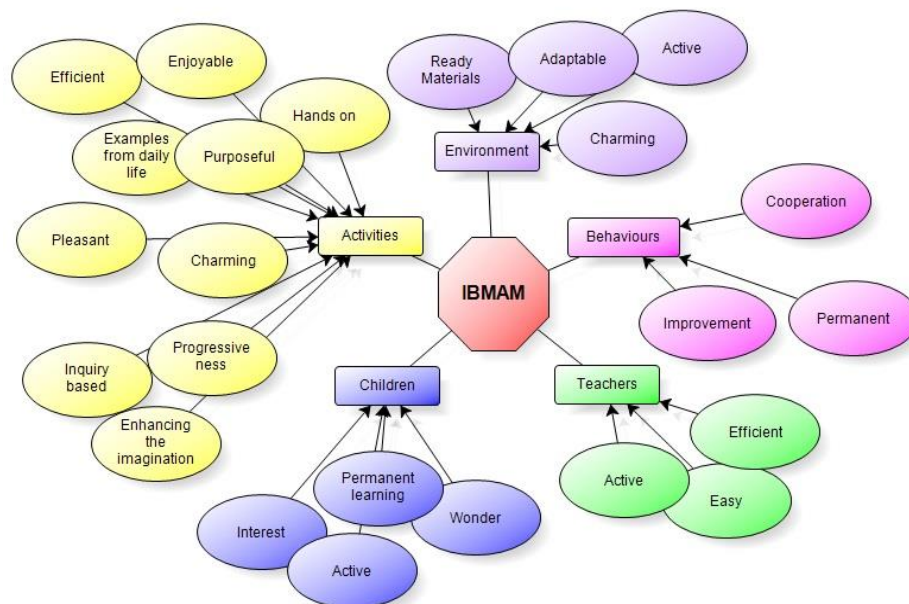
Figure 3. Inquiry-based mathematics activities module (IBMAM)

Ceren stated that IBMAM was fit for its purpose and prepared in advance, which provided great convenience. She also stated that IBMAM was a fun and efficient module that drew children's attention provided them with the opportunity to learn by living, and therefore, facilitated active engagement and learning retention. She also suggested that IBMAM consists of creative and fun activities that are appropriate for children's developmental characteristics and age, making them more willing to engage in learning.

The researcher prepared the materials in IBMAM himself and brought them into the classroom. She knew that a rich educational setting was required by inquiry-based approaches (NRC, 2000). Therefore, he placed a *"math center"* in the classroom, which provided children with access to over a hundred ready materials developed and replaced with new ones once a week for 10 weeks by the researcher. The materials provided children with the opportunity to experience math in an active way and the teacher with the opportunity to execute activities comfortably and easily. They were all recyclable materials. Children were asked to think about the materials and were expected to make similar materials with parents' help at home.

The literature also supports Ceren's views of IBMAM. Inquisitive activities should be carried out in learning environments that are appropriate to their developmental stages in order for children to develop high-level thinking skills (Clements & Sarama, 2004, 2007, 2008; Delacour, 2016; Karademir & Akman, 2019; Karademir et al., 2020). Skills should be supported by concrete materials so that children can experience and make sense of them. According to Nelson (2005), supportive classroom and home settings that are rich in materials encourage engagement and improve learning and contribute to their cognitive and social development in the preschool period. In this way, school activities can be put into practice in daily life and increase learning retention (Niklas et al., 2016). IBMAM materials triggered children's curiosity and extended their attention span. The enjoyable activities of IBMAM increased children's interest and provided learning by living and doing and learning retention. This result is consistent with that reported by Ryan and Laurent (2016), who investigated the effects of inquiry-based approaches on children's success. They concluded that the approaches that provided children with the opportunity to construct their own knowledge led them to cooperation and improved learning retention and that activities designed in this manner stimulated more interest and curiosity than did traditional applications. IBMAM provided children with ready-made materials, more interaction, active experience and learning retention. Such opportunities help children develop skills. Ceren emphasized IBMAM's ability to provide learning retention and to relate to daily life and its difference from other activities.

Ceren emphasized that IBMAM facilitated active engagement and provided children with daily life examples, which helped achieve learning retention and that it consisted of active and collaborative activities that achieved learning retention instead of passive pen-and-paper activities that bored children. These statements that Ceren considers activities that keep children active and extend their attention span to be important for

their development. Walker and Shore (2015) have stated that inquiry-based activities provide teachers and children with the opportunity to change roles. IBMAM also provided children and the teacher with the opportunity to change roles. Children assumed a researcher's role and established close relationships with their peers to inquire. Ceren's statements also show that the positive relationship with parents facilitated the follow-up of children at home, which also positively impacted the implementation of IBMAM activities. This suggests that new information is put into practice out of school, i.e., at home. The fact that the researcher sometimes failed to adhere to the schedule did not negatively affect the teacher. The use of interesting and attention-grabbing materials facilitated learning retention. Research shows that preschool teachers are likely to have negative attitudes towards math activities in the first years of teaching but adopt new constructivist math teaching methods in the following years (Aslan et al., 2013; Aydin, 2009; Karakus, 2015; Tarim & Bulut, 2006).

Ceren also expressed her observations on the effects of IBMAM on children. She was asked to indicate the contribution of IBMAM to children's learning. Her responses were grouped under the subthemes as presented in Figure 4: *"social emotional field, cognitive domain, language field and psychomotor field."*
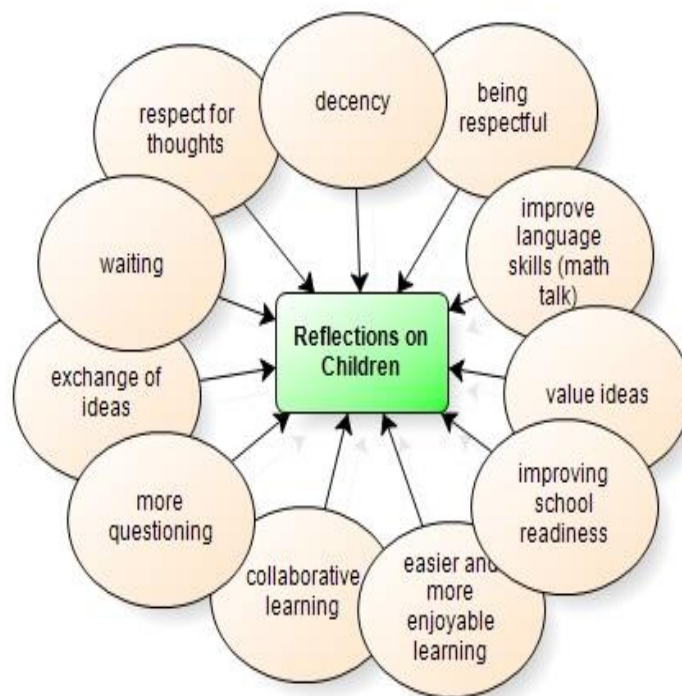
Figure 4. Reflections on children

According to Ceren's statements, IBMAM helped the children develop skills in all areas at different levels. She stated that the children developed social and emotional skills as well as language and questioning skills. They also developed the skills to exchange

ideas and use them even in routine activities. Linn and Jacobs (2015) examined the effects of the inquiry-based approach on the interaction between teachers and children and reported that the interrogation approach contributes positively to the improvement of teacher-child interaction and the development of language skills. Taskin (2013) also stated that there is a positive relationship between children's math achievement and language skills. In thirty activities, children interacted with their peers and adults and had to use math language. Children were in communication with adults and peers to perform both school and home tasks. It can be stated that adult-child communication and language used at home have a significant effect on academic skills. IBMAM provided the parents with the opportunity to perform math activities and use math expressions with their children. Dialogues and activities performed during IBMAM increased the children's ability to use math expressions. Susperreguy and Davis-Kean (2016) found that math expressions used at home are closely related to math skills that children use in school. Our results are, therefore, similar to those previously reported. We can state that the activities and tasks in IBMAM improved the children's interaction and language skills. Inquiry-based approaches require the use of communication and language skills. This is thought to be the component that helped the children develops math talk and communication and language skills.

These statements show that the children tried to use new forms of inquiry through peer interaction and involved math in their language use. They associated the math concepts and skills they learned from daily life activities, indicating that they internalized math. Children used new information at home, which is important for family engagement and school collaboration. This result is consistent with the result reported by Begum (2007) reported that family engagement and enriched home activities are associated with the development of children's math skills. Baker (2015) also highlighted the role of family engagement and environmental regulation in facilitating early childhood math skills development. Through tasks and activities, the children also put the new knowledge learned from IBMAM into practice at home. IBMAM activities facilitated the development of fine and large muscle skills and provided the teacher with the opportunity to learn different activities for fine muscle development.

These statements show that the integration of IBMAM into preschool education curriculum can contribute to education. IBMAM will help children develop positive attitudes towards math and make their transition to primary school easier. Research shows that early childhood education facilitates the transition to the next education levels (Aslan & Aktas Arnas, 2015; Clark et al., 2013). Clements and Sarama (2013) found that math skills developed in early childhood predict future high levels of literacy and math skills. From this point of view, the quality of math activities and the adoption of different approaches directly affect children's future life. Learning opportunities, a variety of methods and content, the level of interaction between the teacher and the child in early childhood math education help children develop the belief that they can comprehend and achieve math. The literature and our results show that an inquiry-

based and qualified math education program minimizes the loss of math skills in children.

IBMAM has inquisitive processes for every activity. Therefore, the children used language skills more than usual during IBMAM activities. Let us examine in detail all the stages of the activity "Does it float or sink?" and see how the children actively used language skills. In the first step, "Initial Stage," children listen carefully to the teacher's interesting and attention-grabbing narratives, which increases their willingness to discover and participate in the activity. In the second step, "Initial Inquiries," children begin to question their own lives and knowledge and have to use the language actively. In this way, they have to share their opinions with others and form groups with like-minded peers. This process helps them develop self-expression skills and teach them to listen to others. What is the relationship between the weights of objects and their sinking or floating? Are there other factors affecting their sinking or floating? What are the common characteristics of objects that sink? In the third step, "Saving the Problem," children try to establish a relationship between the language of speech and the language of painting or writing. Children illustrate a problem to save it and try to put their ideas on the paper and show them to their group friends.

Meanwhile, the teacher goes from group to group and learns about children's drawings and records it. In the fourth step, "First Remarks and Possible Answers/Solutions," children express their guesses regarding their solutions to the problem. For the activity "Does it float or sink?" they express their opinions as "The objects that are lighter than water float because [...] the objects that have air in them float because [...] large objects sink because..." In the fifth step, "Experiments and Observations," children conduct experiments and observations actively and interactively. In the sixth step, "Method Selection," children determine strategies and methods. In the seventh step, "Comparison of initial ideas and Results," children compare their initial opinions with their experimental or observational results. If the difference/conclusion confirms their assumptions, they explain why their hypotheses were accurate. If not, then the inquisitive process should be repeated. In the last step of the interrogation and activity, experimental and observational data are combined. It is then recorded in a clear manner using mathematical expressions. Analysis results are shared with other friends and groups at this stage. As you can see, children use language skills effectively in all steps of inquiry-based activities.

According to the NCTM (2000), learning math knowledge and concepts is as important as sharing and using them to communicate and discuss. Using inquiry-based approaches with preschool activities provides experiential tools that allow children to actively develop language skills (Austin et al., 2013). Almost all of IBMAM activities encouraged the children to develop language skills and actively use the language. Group activities helped them develop language, listening and understanding skills and decision-making and collaboration reflexes. In this process, they learned new concepts and words. Bicakci (2009) examined the effects of project approaches on preschoolers and concluded that small group activities supported all

developmental areas. The project approach resulted in a significant difference in language skills between the listener and speaker. It is similar to our results. Uyanik and Kandir (2014) also investigated the effects of an educational program on preschoolers' academic and language skills aged 61 to 66 months. They reported that preschoolers in the experimental group had higher vocabulary, numbers, letters, pronunciation and expressive language scores than those in the control group and that the difference between the two groups was permanent.

Observations for IBMAM

The researcher periodically observed Ceren's classroom to determine the interview data's consistency. Table 1 presents the effects of IBMAM based on long-term observations.

Table 1.

Observations Notes

Theme	Subtheme	Codes	Notes from 4-Months Observations
Creativity Preschooler	Dimensions	Fluidity	Children's fluidity, which is a dimension of creative thinking, improved. They developed more options and ideas to solve problems than they did before. They discussed with their peers. Our observations confirmed Ceren's views on this subject.
		Flexibility	IBMAM enabled the children to face different situations and events. In the first days, they had difficulty adapting to the questions of inquiry and active learning. However, in the following days, they broke away from preconceptions and tried to adopt the new approach. They thought about and developed different forms of recyclable materials used in activities. Many of them tried to design math materials from recyclable materials at home, such as egg cases or shoeboxes and presented them in the classroom.
		Elaboration	They focused longer, paid attention to details and developed different perspectives. For example, they learned to see the magnet not only as a magnet but also as a speckle for a ladybug, a stone inside the water, a number on a board, or a line attached to a stick.
	Stages	Preparation	Inquiry-based activities that support critical thinking helped children develop creative thinking. They approached cases and situations from different perspectives. Material-rich activities encouraged them to collect data on problems and aroused their interest and curiosity.
		Incubation	Children combined their views of situations presented in the previous weeks with their experiences and conveyed them in the following weeks, indicating that they were mentally preoccupied with that case or situation within

			the incubation stage. They tried to use new ideas and products to solve problems, suggesting that IBMAM activities increased their attention and motivation.
		Epiphany	When children found a solution to a problem alone or in a group, they exclaimed with excitement as "We've cracked it!" or "I've figured it out!" and showed their solutions to the researcher and their classmates.
		Conclusion and Development	Children tested their thoughts and tried to determine whether they satisfied the needs identified in the first place. They were constantly involved and interested in applying the solutions they tested for accuracy. They found solutions to some problems after a few weeks and went through the repetition process, indicating that they were interested and enthusiastic about IBMAM activities.
Classroom	Educational Environment	Materials	The classroom was designed to facilitate inquiry and positively affect the duration and quality of IBMAM activities. Inquisitive materials aiming to keep children's perceptions dynamic triggered learning by touching, discovering and having fun.
		Math Center	The math center allowed children to access math materials at any time. Even in the transition periods of the activities of the Ministry of Education 2013, children tried to amuse themselves with inquisitive materials. They integrated math into their lives whenever they liked, and therefore, had the opportunity to use it more often than before. The educational environments where the intrinsic motivation of the teacher supported learning made learning easier and permanent.
	Interaction / Atmosphere	Teacher-child	IBMAM helped the teacher develop new skills, which resulted in changes in her classroom management. She became really interested in the activities and supported her children's efforts. IBMAM provided children with more choices and decisions, resulting in more teacher-child interaction than usual. The exchange of ideas between the teacher and her children enabled the latter to develop thinking skills, make decisions, and solve problems. IBMAM made the teacher-child interaction more open, bi-directional and warmer and made the classroom atmosphere healthier.
		Child-child	Children interacted with other their peers while selecting materials from the math center and playing with them. They used math as the language of communication. They combined math talk and inquiry and tried to find more creative and realistic solutions to problems.
Children	Retention	Internal Motivation	Children were not forced to participate in any of IBMAM activities and were expected to participate in them voluntarily. They participated in IBMAM materials with curiosity and interest. The teacher and children themselves expressed it many times that they looked forward to IBMAM activities. Children noticed the change in themselves and were enthusiastically involved

		in IBMAM activities.
	Active Engagement	As IBMAM was based on constructivism, children assumed an active role in the process. They were directly involved in learning by living and doing. IBMAM let children regain confidence and encouraged them to grow up to be people who can think, participate, plan and put their ideas into practice.
	Gamification	Children enjoyed IBMAM activities and learned new things from them. They wanted to perform the activities again and again. For example, they wanted to play the activity "Fish of Numbers" over and over again for three weeks, indicating that IBMAM is fun.
	Spirality (Repetition)	Another feature of IBMAM activities is that they contain repeatable acquisitions. Different activities focus on the same acquisitions at different times, achieving learning retention. Most children reached new solutions by using the strategies and methods they had previously learned from spiral repetitive activities. For example, a student who learned the strategy "counting multiples of 10" used it in an activity related to addition.
Learning Processes	Attention Problem-solving, Making a connection, Communication, Relating to daily life	The Initial Stage presented interesting materials and cases associated with daily life. Environment and daily life examples were used for children to gain new knowledge. IBMAM enabled them to develop the skills of researching, inquiring, predicting, practicing, interpreting andcommunicating with peers. They were more skeptical and asked more questions than their peers, which can be considered a learning outcome of IBMAM.
Thinking Skills	Convergent Thinking	Children had initially used easy and previously learned ways to solve questions. However, they abandoned that habit towards the middle of the IBMAM process.
	Divergent Thinking	IBMAM encouraged children to use different ways of thinking, intuition and imagination to reach solutions. They began to focus more on unstructured problems and chose to predict different factors and try different ways.
	Inquisitive Thinking	Children sought to be more reflective during IBMAM. They tried to understand the logic of problems and solve them. Those who developed reasoning skills entered an active process to understand their peers' opinions. Those who developed different perspectives began to learn how to put their math knowledge to use in other fields.
Teacher	Task	On IBMAM days, the teacher was as passive as possible and observed the process and recorded the important parts of the techniques and activities. At the end of the day, she helped the researcher assess IBMAM and gave some hints to make the activities more effective.
	Classroom Management	The teacher used IBMAM knowledge and skills in her own activities as well. She replaced her classroom management skills with the preventive and holistic model in IBMAM. She sought to provide children with

		the opportunity to express themselves more and create a freer classroom environment where decisions were more respected.
	Views	The teacher didn't like the fact that IBMAM was only 3.5 months long. She thought that teachers should be provided with in-service training on the inquiry-based approach. However, she was very pleased with the positive impression that IBMAM left on children and their parents. Her children stated that they would use the inquiry steps of IBMAM in math and other types of activities. She also believed that the knowledge acquired by her children was permanent.
Parents	Parental Engagement	Parents closely monitored the change in their children throughout the process. They witnessed their children use math more in home activities or daily life. They performed math games and training with their children, especially on weekends according to the researcher's instructions. They tried to encourage their children to do what they wanted to do about math in daily life.

IBMAM led to changes in the class, children, teacher and parents for four months. IBMAM activities rich in materials (*math center*) provided the children with a more enjoyable and long-lasting learning experience. Discovery-based learning improved their motivation and communication with peers and teachers and made the classroom atmosphere warmer and healthier. IBMAM enabled the children to use cognitive processes more actively and the dimensions of creativity (fluidity, flexibility and elaboration) more frequently. During IBMAM, they abandoned convergent thinking and adopted divergent thinking. They established logical connections between subjects and problems and tried to relate them to daily life. They were actively engaged in IBMAM activities and achieved learning retention through inquiry. During IBMAM, the teacher assumed an observer/guide's role, which facilitated classroom management while making the children feel freer. Although the teacher found IBMAM a bit too short, she was pleased with the permanent changes that she noticed in her children and herself. IBMAM provided the teacher with the opportunity to learn new things and increased her confidence so much so that she stated that she would use the inquiry-based approach for all her activities. The parents followed the whole process closely and were pleased to see changes in how their children approached math and used math skills in daily life. They considered the change promising for their children's future education.

IBMAM helped the children develop and use observing, comparing, classifying, measuring, recording, communicating, estimating, and concluding skills. It also led them to use inquiry steps that cover many scientific process skills. It can be stated that the whole IBMAM process involves activities that require active use of process skills. For example, if we examine the skills used in the activity "We are playing dart," we see that children are expected to start using "Thinking Skills" in the Initial Stage. In the Initial Inquiries, they are expected to "compare" their opinions with their peers' and "classify"

and restructure them accordingly. This stage also helps them develop "problem-solving skills." They should also be able to predict possible solutions to the problems they may encounter. They are then asked to compare their predictions with those of their peers. Prediction and comparison skills are two critical steps that should be taken to perform inquiry (NRC, 2000, 2004). Observing cases and changes directly helps children develop observation skills and make inferences regarding activities to develop "inference" skills. Moreover, sharing results with peers helps them develop "communication and display" skills. As can be seen, inquiry skills are also intertwined with scientific process skills. Inquiry-based activities that are appropriate for developmental characteristics contribute to the multidimensional development of children.

Inquisitive processes are required for high-level thinking skills in math education (Clements, 2007). According to Harlen (2013), we should use scientific process skills to dwell on problems, understand and structure information, andassess results. There are many studies reporting that inquiry-based teaching method has a positive effect on math learning, thinking skills, attitude towards math and retention (Henningsen, 2013; Hollingsworth & Vandermaas-Peeler, 2017; Ryan & Laurent, 2016). We believe that IBMAM made positive contributions to the children's math and scientific process skills thanks to two important factors. First, IBMAM encouraged them to learn, think, enquire and explore actively, increase their sense of curiosity, and support learning by living and doing. IBMAM activities provided the children with the opportunity to define problems, generate assumptions, collect data and use the data to draw conclusions. Second, IBMAM is based on a constructivist approach, and therefore, includes constructivist methods and strategies. Learning by living and doing involves structuring knowledge in the mind through the experience and incorporating small parts. IBMAM enabled the children to construct reality both in terms of living and discovering facts.

Impact of IBMAM on Parents

The researchers conducted interviews with parents in three different sessions to find out about their views on preschool math education. This section will present their responses. Interview findings were given under themes (see Figure 5).

Figure 5 shows that the parents observed many changes in their children. Most parents stated that IBMAM increased their children's interest in math and enabled them to take a liking to it. These statements show that children began to share with their parents what was going on in school, continued to use such skills as counting numbers and had a growing interest in math. The children adopted IBMAM activities and tried to prepare materials to carry out similar activities at home with their parents' help. The parents also observed their children more clearly and expressed their views on many changes in their lives. They focused on integrating math into everyday life and speech, an increase in recognition and use of numbers and improvement in inquiry skills and self-confidence.
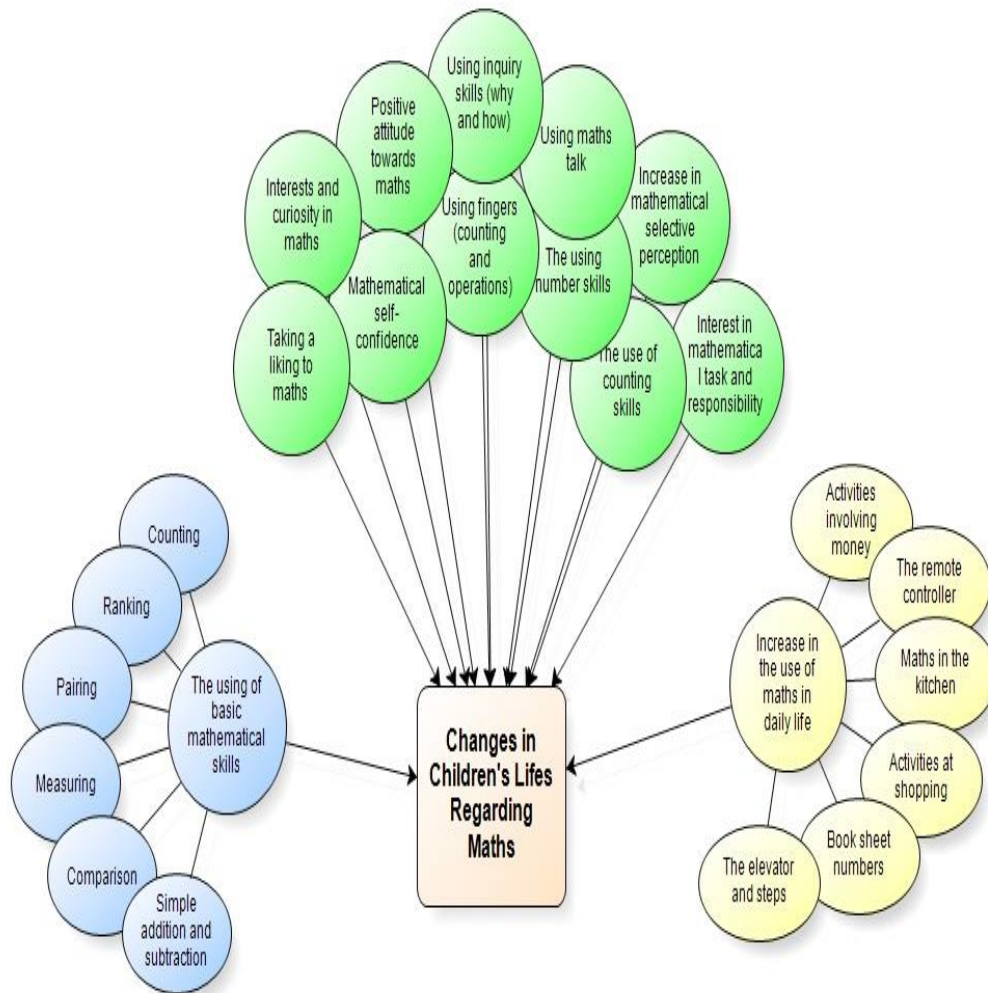
Figure 5. Changes in children's life

These statements showed that the children recognized and used numbers, countedcount fingers, establishedestablish a cause-effect relationship and put numerous skills into practice. They also showed that they developed inquiry skills and began to integrate math into their language. This finding was consistent with the finding that was reported by Susperreguy and Kean (2016), who conducted a study on 40 mothers and reported that parent-child interaction contained much more mathematical content than previously thought. They also found a positive relationship between math expressions and math skills. They stated that children tend to put their daily expressions into use in their education life. They suggested that parents used math expressions that could be supported by home activities.

IBMAM encouraged the children to use language during each activity. The parents' views also confirmed the observed changes. Parents stated that IBMAM enabled their kids to use math concepts and words more frequently and in different ways in daily life.

It also encouraged them to use new math expressions at home and associate them with their daily skills. This also suggests that inquiry-based approaches, which are constructivist approaches, achieve learning retention.

Figure 6 shows that children's change led parents to feel surprised and happy and made them more optimistic about the future. Theses statement shows that the children are able to put math knowledge into practice, which surprises and pleases their parents.
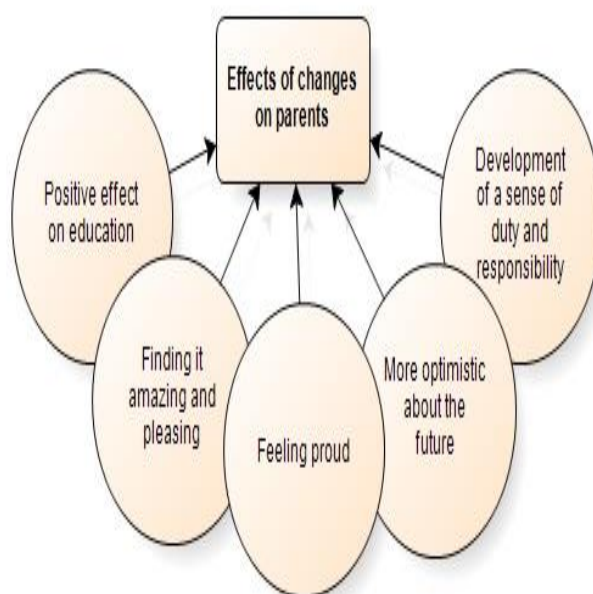
Figure 6. Effects on parents

Some of the parents were more optimistic about the future and expected their children to be supported in this way in the future as well. Another parent stated, *"The weekly tasks that you assign to children are useful. My kid consulted with us about the assignments and worked on them every Friday and Saturday. His motivation got us as well, so we bought some more books"*, suggesting that IBMAM increased the sense of responsibility of the child and the parents and raised the latter's awareness.

Guided inquiry-based IBMAM was designed and implemented to improve children's mathematical skills aged 60-72 months. IBMAM enabled the children to better understand the concepts of "Numbers and Operation," use them more actively, put them into practice and use math more frequently. It helped them develop more positive attitudes towards math, collaborate, and discuss with their peers. The interviews and observations both supported the results and provided detailed information about the IBMAM process and the experiences of children. Few studies are analyzing inquiry-based learning processes and instructional models for early childhood math, which

has remained under-researched. We, therefore, believe that our results will guide researchers.

Conclusion and Suggestions

This study examined a classroom teacher's and her children's parents' views on the effects of an Inquiry-Based Mathematics Activities Module (IBMAM) on children. The teacher and parents were asked to assess the IBMAM process in all respects, and in-class observations supported the data.

Interview with Teacher

The teacher was asked to assess the overall IBMAM process. According to her, IBMAM is an interesting and easy to use module that enhances creativity, provides rich material, active engagement and learning retention, helps to relate new knowledge with daily life, focuses on communication with children and facilitates classroom management skills. She stated that IBMAM affected four developmental areas. To her, IBMAM helped her children develop social and emotional skills, encouraged them to exchange ideas, and positively impacted their language skills both at home and in the classroom. IBMAM changed the way they reach information and encouraged them to develop high-level thinking skills, such as observation, comparison, classification, recording, estimation, and conclusion. IBMAM's activities supporting fine and large muscular development contributed to psycho-motor development.

Results of Observations

IBMAM enabled the children to use cognitive processes more actively and the dimensions of creativity (fluidity, flexibility and elaboration) more frequently. It helped them use preparation, incubation, epiphany, conclusion, and development (stages of creativity) more effectively. It provided a rich, stimulating classroom environment, made the children active learners and enabled them to incorporate math into games whenever they wanted to. The inquisitive materials of IBMAM provided learning retention. The classroom's positive and warm atmosphere improved both teacher-child and child-child interaction, encouraging the children to exchange ideas and involve themselves in decision-making processes. In this way, they had the opportunity to make more creative and critical decisions and reflect on their solutions. IBMAM's spiral-designed gamified and fun activities increased the children's motivation and active engagement and made learning outcomes, knowledge and skills more permanent. IBMAM encouraged them to abandon convergent thinking, adopt divergent thinking, develop different perspectives, and apply them to everyday life. After IBMAM, the teacher made her classroom management skills and thinking system more child-centered and facilitated active learning. She valued her children's ideas more and

started using inquiry steps to design activities. Lastly, IBMAM met the parents' expectations and facilitated their active engagement in the process.

Interviews with Parents

According to the parents, math is important because it is used in every sphere of life, helps children throughout their educational life, keeps them away from financial problems and enables them to have decent jobs. To them, math education should make sure that children love math, be fun enough not to bore them, and use toys. One and a half months after the onset of IBMAM, the parents notice the following changes in their children: (1) IBMAM increased the children's interest in math and taught them to love it, (2) provided them with the opportunity to expand their knowledge and skills of numbers, (3) increased their sense of responsibility for math tasks and assignments and (4) improved their communication with their parents regarding school activities. Three and a half months after the onset of IBMAM, the parents notice the following changes in their children: (1) IBMAM increased the children's ability to put math knowledge into practice and (2) recognize and use numbers, (3) enabled them to use math expressions more often and (4) increased their self-confidence and inquisitive skills. The parents' feelings about the change in their children were as follows: (1) they were amazed by skill development, (2) hopeful for the possible positive effects of the change on their children's education life, (3) pleased that their children developed a sense of responsibility for math tasks and assignments and (4) proud of their children's achievement.

The recommendations of this study are as follows: (1) Different disciplines can be integrated to expand the scope of the inquiry-based approach, (2) IBMAM activities can be extended over a longer time to increase their effectiveness, (3) materials or settings can be prepared in schools to facilitate children's experience with math, (4) Alternative programs can be developed to help children develop math skills, and possible effects of the programs can be investigated, (5) Longitudinal studies can be conducted to monitor changes in children's academic achievement and math skills and (6) national inquiry-based education projects involving teachers and preservice teachers can be designed to provide the target audience with the opportunity to learn about inquiry-based approaches.

Parental engagement should be designed to ensure that children's attitudes and skills through inquiry-based math activities become permanent. Parents should be involved in inquiry-based math learning processes to support the development of children in the framework of school, teacher and parent cooperation. Parental engagement can also facilitate the integration of IBMAM to the home setting, which can also be designed to facilitate the development of math skills. Further research can also focus on the impacts of IBMAM on other areas of development in children.

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The Childhood, Adolescence and Adulthood Experiences of Adult Only Children and their Interpersonal Relationships *

Metin KOCATURK**

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Abstract: It appears that the only children are raised in a unique way of life and differentiate from children with siblings concerning their psychosocial experiences. In this study, how adult only children perceive their only-child experiences in the context of psychosocial experiences and how they shape those experiences in their interpersonal relationships were discussed. The experiences of being an only child were evaluated by comparing childhood, adolescence and adulthood. This study was conducted in a phenomenological research design, one of the qualitative research types. In this study, there were 10 only children, five females and five males, aged between 20 and 26 using the criterion sampling technique. Semi-structured interviews were conducted with the participants. The data obtained from the interviews were analyzed with interpretive phenomenological analysis. Toward the findings of the study, a framework was structured on how the only child-experiences are interpreted in adulthood. The main themes of the research were being an only child, the only child in family relationships, the only child in friendship, and the only child experiences in the past and present. From the experiences of being an only child, parenting processes of the only children can be investigated.

Keywords: Only child, personality traits, interpersonal relations, interpretive phenomenological analysis.

Introduction

Children who grow up and develop without siblings or peers in the family from infancy to adulthood are defined as the only children (Falbo & Polit, 1986). Being an only child is a common phenomenon today. As a matter of fact, according to the data of 2016 in the European Union countries, the rate of families with one child is 47%, the rate of families with two children is 40%, and the rate of families with three or more children is 13% (European Commission, 2016). In Turkey, although there is no clear statistical information about the number, the number of one-child families has increased. Parents may prefer to have an only child in terms of economic factors, career progression, physiological conditions, and childcare (Rosen, 2001; Weinlein, 2000). Thus, the number of families with one child is increasing gradually, and the phenomenon of being an only child becomes a situation, including different experiences.

Growing up as an only child is a process that has unique developmental characteristics. Showing all attention to the only child during childhood and adolescence comes to the fore. Besides, it is also possible for the family to direct all its economic, social and emotional resources to the only child (Falbo, 2012). It is stated that the only children who are in the focus of their parents are more successful academically than those with siblings (Chen & Liu, 2014). On the other hand, it is stated that due to the overprotective approach of parents, excessive tolerance and inadequacy of discipline, the only children may be spoiled, inadequate to share and inadequate concerning social skills, and experience loneliness and have a perfectionist understanding (Mickus, 1994; Roberts & Blanton, 2001; Rosen, 2001). At this point, parents' approaches in their social interactions with their only child stand out as a prominent situation. The attitudes of parents towards their only child affect their development process. It is thought that parental approaches or attitudes may be determinant in these situations that may arise in the experiences of only children.

Within the scope of interpersonal relationships of the only children, there are explanations about their relationships with their parents as well as their friendship relationships. The only children may experience conflict in their social relationships due to excesses or imbalances in the parents' attitudes towards their only child (White, 2004). However, there are some thoughts that the only children have difficulty in interpersonal adaptation, show weakness in social skills, and are isolated from social environments by their peers (Falbo, 2012). On the other hand, it is stated that siblings contribute to social development, but the only children's social skills are not weaker than children with siblings (Bobbitt-Zeher & Downey, 2013). Considering the related literature, it can be thought that the context in which they live determines the course of the social relationships of the only children. In addition, the elements that arise in the relationships of the only children with their parents can be reflected in their experiences of peer relationships.

The first studies on experiences of being an only child are based on Adler's research on birth order (Adler, 1927/2018, 1929/2018). Adler examined the development of the first child, middle child, last child and the only child in birth order studies and tried to determine how those children's characteristics were shaped. In the context of the characteristics of birth order, it was stated that the only children were self-centered and insufficient concerning social skills (Adler, 1964). Besides, it is stated that the only children grow up like adults due to the absence of siblings in the family and excessive approach of the parents.

When examined in regard of development periods, the experience of being an only child in childhood and adolescence differs from children with siblings in terms of parenting attitudes, family relationships, personality traits and peer relationships (Doh & Falbo, 1999; Pickhardt, 2008; Polit & Falbo, 1987; White, 2004). The reflections of childhood and adolescent experiences in adulthood reveal a specific situation of the experiences of being an only child in all developmental periods. In this respect, examining the prominent themes in the only children's experiences will allow the formation of a holistic framework. Thus, this study was designed with phenomenological research to interpret the experiences of being an only child that appears in childhood, adolescence and adulthood and draws attention to interpersonal relationships.

The present study aimed to investigate how adult only children make sense of childhood, adolescence and adulthood experiences and interpersonal relationships and experiences. The research questions composed in line with this main purpose of the research are as follows:

1. How do adult only children make sense of the experience of being an only child?
2. How do adult only children define the only children's personality traits? How do they evaluate their own personality traits?
3. How do adult only children interpret family relationships?
4. How do adult only children make sense of friendship relationships?
5. How do adult only children compare their childhood period with their current life status?
6. How do adult only children compare adolescence with their current life status?

Methodology

Research Design

Phenomenology, which focuses on how people make sense of an experience with their interpretations and expressions, is also defined as the perception of the world in which

people live (Langdridge, 2007; Mayring, 2011; Smith & Osborn, 2015). In this context, this study was conducted with a phenomenological design, one of the qualitative research types, as the present study aimed to investigate how adult only children make sense of and interpret the experiences of their childhood, adolescence, adulthood, and interpersonal relationships with their perspective.

Participants

In phenomenological studies, participants are determined by criterion sampling, one of the purposeful sampling techniques (Christensen & Brumfield, 2009). In this study, the participants were selected among individuals who had experiences related to the only child phenomenon through criterion sampling. Therefore, the participants who showed similar characteristics to explain the research phenomenon were reached. The study group consists of 10 only children (5 females, 5 males) between the ages of 20-26, who were in young adulthood. In addition, the participants were from different socio-economic backgrounds, attending university or having a university degree. Anonymity and confidentiality was preserved. Information about the participants is given in Table 1 below.

Table 1.

Information about the Participants

Name	Gender	Age	Educational Status	Marital Status
Pelin	Female	26	Bachelor	Single
Sila	Female	22	Bachelor	Single
Melih	Male	20	Undergraduate	Single
Ilayda	Female	24	Bachelor	Single
Kaan	Male	24	Bachelor	Single
Ahmet	Male	21	Undergraduate	Single
Asli	Female	21	Undergraduate	Single
Murat	Male	20	Undergraduate	Single
Tolga	Male	25	Bachelor	Single
Ebru	Female	20	Undergraduate	Single

Data Collection and Procedure

In the study, interviews were conducted with the participants to determine and interpret the childhood, adolescent, and adulthood experiences of the only children and their interpersonal relationships experiences. Semi-structured interview was utilized. With semi-structured interview questions, new situations and topics that may arise during the interview are also investigated (Smith & Osborn, 2004). In this way, it was aimed to evaluate new questions that may arise during the interview within the scope of this study. The questions asked during the interview with the participants within the scope of this research are as follows:

1. How do you define being an only child?

    a.   Are there any similarities/differences with what society perceives?

2. What are the advantages/disadvantages dimensions of being an only child for you?

3. How are your relationships with your parents? How does it differ from ones with siblings?

    a.   What are the expectations of your family from you?

    b.   How do you perceive/interpret them?

4. How are your friendships as an only child?

5. How would you compare your childhood with your current life status?

6. How would you compare your adolescence period with your current life status?

7. What would be different in your life if you had a sibling?

8. Was it important to be an only child in the growing-up process?

In this study, the only children in adulthood were identified as participants. In line with the main purpose of this study, semi-structured interviews were conducted with individuals aged 20-26 who are the only children of their family in terms of evaluating the experiences in childhood and adolescence and interpreting the experiences in interpersonal relationships. Before the interviews with the participants, they were informed about this study. Interviews were conducted with people who chose to participate in this study voluntarily. Also, the participants were informed that the audio recording would be taken. The interviews' records were transcribed verbatim and the data in these transcripts were analyzed by the researcher.

Data Analysis: Interpretative Phenomenological Analysis

The data obtained from the participants in this study were evaluated based on the interpretive phenomenological analysis. In the interpretive phenomenological analysis, the way individuals make sense of their lives and the connections between their experiences are interpreted by the researcher (Eatough & Smith, 2008). In other words, interpretative phenomenological analysis aims to make sense of individuals' lives, interpret this sense, and reveal the themes. The steps followed in the analysis of the data of the study are as follows: Interview transcripts were prepared, and certain meaning groups were formed. These groups, which were first created at the personal level, were later expanded to the whole group. Themes were created by bringing together these groups of meanings. Among these themes, related themes were combined and top themes were determined. Quotations were given on how the experience was interpreted by adult only children. Thus, it was shown how interpretations of the themes and sub-themes were meaningful. Since it aimed to interpret the psychosocial experiences of adult only children in childhood, adolescence and adulthood and their interpersonal interactions, the data obtained in this study were evaluated with an interpretive phenomenological analysis.

Accuracy and Credibility of Findings

Feedback was received from three experts in the field of Guidance and Psychological Counseling regarding the upper and sub-themes that emerged after the analysis of the data, and the findings were reviewed in this way. During the research process, it was tried to ensure consistency by ensuring the consistent progress of qualitative research with experts' opinions. Also, the research data were examined by different experts. As a result of these examinations, the qualitative research findings were tried to be confirmed.

To ensure the transferability of this research, each stage of the qualitative research process is explained in detail in this section. In addition, participants were determined by criterion sampling technique, one of the purposeful sampling techniques. Thus, the transferable features of the qualitative research phase were presented within a certain framework.

Role of Researcher

In phenomenological studies, situations related to the researcher, such as the researcher's perspective, experiences and prejudices regarding the subject under investigation, are considered. In this respect, a perspective is formed about the position of the researcher in the interpretation of the phenomenon by determining the researcher's stance regarding the phenomenon studied (Christensen & Brumfield, 2009; Creswell, 2014). In this study, the researcher's perspective on being an only child is based on experiential observations. However, the only childhood experiences in the literature are considered in a holistic way. Besides, the researcher evaluated the phenomenon of being an only child with an approach that integrates the perspective of being a sibling child and being an only child.

Findings

In line with the purpose of this study, the content of the interviews with individuals who were the only children of their family were examined with interpretive phenomenological analysis. As a result of the analysis, four upper themes emerged. These themes were interpreted under the headings of being the only child, the only child in family relationships, the only child in friendship relations, and childhood, adolescence and adulthood periods within only child experiences. The sub-themes of being an only child included definitions of only child, the perception of society for the only children and loneliness of only children. In only child in family relationships theme, sub-themes of only focus of parents' attention and pressure created by parents' expectations emerged. The sub-themes of the worthiness of close friendship and the difficulty of making friendships were examined under the only child in friendship relationships, another theme. Finally, with the comparison of childhood, adolescence

and adulthood, the possible effects of having siblings discussed in childhood, adolescence and adulthood in the only child experiences theme (see Figure 1).

Being Only Child	**Only Child in Family Relationships**	**Only Child in Friendship**	**Childhood, Adolescence and Adulthood Periods within Only Child Experiences**
• Definitions of only child • Only child perception of the society • Loneliness of only child	• Only focus of parental attention • Pressure resulting from parental expectations	• Value of close friendship • Difficulty in making friendship	• Glance at childhood from the point of adulthood • Glance at adolescence from the point of adulthood • "If you had a sibling" thought

Figure 1. *Main themes and sub-themes of adult only children's experiences*

Being the Only Child

In their experiences of being an only child, the participants first stated how the only children are defined, the society's perception of an only child, and the characteristics of loneliness only children experience. By combining their experiences of being an only child with the perception and expectation of the environment, they made sense of the characteristics of an only child. The sub-themes of being an only child were definitions of the only child, the perception of society for the only child and loneliness of only child.

Definitions of the Only Child

In the definitions of being an only child, the only children listed some characteristics based on their experiences and observations. The only children described characteristics that might be associated with them and stated that the only children were spoiled, incompatible, aggressive, impatient, ambitious, highly self-confident, self-centered, withdrawn and shy. On the other hand, the only children stated that by turning loneliness into an opportunity, they perceive loneliness as a situation that plays a role in the development of their creativity and that creativity and imagination are developed with a single childhood experience.

Being alone in the only children's growth process can help them mature at an earlier age thanks to the strategies they develop while dealing with the situations they encounter. One of the participants drew attention to this situation. Since he was the person who initiated the interaction in the stage of establishing relationships in his social circles, this turned into an advantage and he stated that he gained more advanced social skills.

Ebru: I can say that I got used to loneliness and comfort since I don't have a brother or sister.

Sila: The only children can be ambitious, spoiled, incompatible and curious.

Kaan: Some of the only children are really spoiled and can get angry quickly. My personality traits include being inpatient.

Pelin: According to my observations, there are two types of the only children. First, he is the type that does not go beyond the words of his family, although it differs from person to person, with low self-esteem, usually anxious and cautious. The second is the type who is spoiled by his family, who is extremely self-confident and thinks he is in the center of the world. I can often define my own personality traits as the first type in this context.

Tolga: Another disadvantage of being an only child is being introverted and shy.

Murat: They can be stingy on some issues. I also have a bit of stinginess. I was also an introverted person at middle school and high school. However, when I was at the university, this introversion lessened. I have improved my ability to communicate better with people. I think the only children are more creative and imaginative. When I was alone, when I was a child, I used to play imaginatively, imagining absurd items and enjoyed it a lot.

Ilayda: Since I grew up as an only child, I had to learn to start interactions early. This situation made me more compliant and assertive.

Ahmet: I think I have matured earlier than I dealt with all the problems I encountered alone. When I was younger, my loyalty to my family was very strong, but when I moved to college, I saw that this loyalty weakened.

Evaluations concerning definitions of being an only child vary in a positive and negative range. While some features and situations indicate positive meanings for single children, some experiences can negatively affect. In this case, social perceptions towards single children come to the fore.

The Only Child Perception of Society

Single children stated that society's perceptions towards them were generally negative. The only children who stated that the only children's social thought includes "selfish, spoiled, perfectionist, and not able to share" do not accept this situation. However, there were the only children who expressed that there was an opinion that it was advantageous to be an only child in the society. In evaluating the perceptions of an only child based on positive and negative values, it was seen that only children and social thought were in opposite directions.

Ahmet: The perception that only children do not know how to share is very common in our society. I think this perception occurs because they see sharing as an obligation. Someone without a sibling can learn to share too. Only children are not selfish.

Melih: Society may think that only one child is spoiled.

Murat: (According to the society) He is a child who is always kept in favor and raised as spoiled.

Asli: Stereotypes are common, as being an only child is advantageous.

Pelin: The perception of society is very important in a family's upbringing a child, especially if they have only one child. Because, parents make extra effort to minimize the error to raise children who are beneficial to society and in accordance with social norms and to reflect their knowledge to the society, to get rid of the saying that "what does the people say?".

> *Ebru: When I say yes to the question of whether you are the only child, there are those who say "how beautiful this is" but there are those who say this is very bad.*

As stated by the only children, the social perception towards being an only child is generally negative. Some parents had extreme attitudes in the process of raising their only child to overcome this negativity. Due to society's negative perception, these extreme attitudes of parents may create pressure on only children.

Loneliness of the Only Child

It was observed that the most prominent experience apart from the definitions of only child and society's perception towards an only child was loneliness. The only children emphasized being alone concerning their experiences of being an only child the most. While making a definition of the only child, talking about only children's specific characteristics and expressing the perception of the environment for only children, they mentioned loneliness of them. They stated that this loneliness was felt from childhood and that this situation had reflections on adulthood.

The expressions of the only children about loneliness were associated with siblings more. They tried to explain the loneliness they experienced during their growing up with their situation in the family. On the other hand, there were also participants who were worried about the future due to loneliness. The experience of being an only child in late adulthood and elderness was considered to be an alarming factor.

> *Ahmet: Just like not having someone to share your chocolate with, and not having someone to share your pranks with.*
>
> *Asli: Loneliness is so hard!*
>
> *Pelin: Being an only child is a situation that is perceived positively by others, but it is very difficult for the person and has negative effects. It is like being always alone, especially being alone at home is difficult.*
>
> *Melih: When I come home from school, I feel alone.*
>
> *Sila: When I was a child, I was very lonely. My mother was working half a day and I was very bored. The only disadvantage for me is that I can't find anything to do when I'm alone and get bored.*
>
> *Ilayda: I have felt lonely since I was little and I wanted a sibling so much that my request was mostly left unfinished.*
>
> *Murat: They are used to loneliness. Since I have been alone at home since I was little, it is no longer a problem for me to be alone, but it scares me to be alone when I get old in the future.*

The Only Child in Family Relationships

Being an only child in family relationships indicated two different dimensions. Being the only focus of the family, that is, the parents' attention, care and love to them is welcomed by only children. However, the family's high concentration of attention and interest can lead to an increase in family expectations. In this case, only children may

be under the pressure of their parents concerning academic, social, relational and value system expectations. The meaning of being an only child in the family was to be the person at the center of attention and also to experience the pressure of intensity of expectations.

The Only Focus of Parental Attention

The most overwhelming advantage of being an only child was to be the center of parental attention and care. Only children positively assessed their parents' interest in them. That family's love and attention were concentrating in one focus turns out to be a gratifying situation for single children. Also, another prominent situation was that parents used almost all of their economic resources for their only children. These experiences were developing from childhood continue in adulthood.

> *Murat: I can say that being an only child means that the parents work for their child, that they make all efforts for their children to have a better future, and that they spend everything they possess for his only child.*

> *Pelin: If I look at my perspective for being an only child, I think that besides difficulties, it also brings convenience. Being an only child is like feeling all eyes on you. Being always interested in you (it can turn into a disadvantage from time to time) and using domestic facilities for you can be considered an advantage of being an only child.*

> *Ebru: It is good for me to have all my family's attention on me.*

> *Kaan: All parents work for their children to have a good future, but in families with a higher number of siblings, some siblings are more prominent and some siblings are less prominent.*

> *Ahmet: The most important advantage is that my family always spares their free time for me.*

> *Melih: It is an advantage to be the only and most loved child in the family.*

> *Ilayda: I think you become everything in the family. Everything is bought for you, everything is done for you. To be the center of attention of the family. To be closer with the parents. There is no such thing as a bedroom fight.*

> *Ebru: It is very nice to have everything you want and always pay attention to you.*

> *Sila: I can say that it is very comfortable, since I was an only child, they gathered all their attention on me.*

Pressure Resulting from Parental Expectations

Parents with only children may have intensive or high expectations. Expectations of parents who use all of their emotional, behavioral, social, cognitive and economic resources for their only child are also rising. They therefore expect their only children to succeed in all cases. This experience is perceived as an element of oppression by only children. Only children can develop the idea of taking responsibility against parental expectations, which can sometimes lead to overburdening the only child.

> *Ahmet: Being the only child in your family, more precisely, in the house, draws attention on you. In this context, I think that people should realize their own wishes and thoughts as well as the expectations, wishes and thoughts of their whole family, and although these expectations are not told or expressed, I think that they are subjected to psychological pressure. This situation reduces*

the self-confidence of the person, creates fear of being alone, relational problems with parents due to your focus in the family, and occasionally aggressiveness to express your own thoughts.

Ebru: Too much control/perfection expectation.

Asli: Because of the focus of attention, I think I have more conflicts of opinion with parents than with those with siblings.

Sila: The family's desire for success all the time

Kaan: Since I was an only child, my family's focus was just me. I think it raises these expectations. The most important expectation was my education. Frankly, I have been very tired to meet the expectations during my upbringing.

Murat: I definitely think that my only child has an impact on my growing up. Although you are free, you are also limited. Because the eyes are on you, so expectations are high in this context and you are trying to meet what is expected of you. Inevitably, a limitation and pressure can be felt. This situation affects you psychologically and continues in the growth process.

The Only Child in Friendship

The only children emphasized the value of close friendship in their social relationships. They emphasize being selective in choosing friends and maintaining a small number of close friendships that affect only children's lives. On the other hand, only children, who stated that growing up alone creates difficulties in establishing friendships, attributed their difficulties in establishing friendships to constantly interacting with adults during the upbringing.

Value of Close Friendship

The only children stated that they value close friendship. They stated that they were selective in friendship relationship and that they could not trust anyone. A participant who express friendship as "like brotherhood" stated that he had a protectionist attitude to his friends. Reflection of the loneliness experienced as a child stands out in the value given to friendship relations.

> *Ilayda: I am very selective in my friendships. However, my friendship relations with the friends I have chosen continue long. However, I am a bit of a vengeful person, when I see their mistakes and these mistakes are things that hurt me, I have a personality that instantly interrupts my relationship and conversation.*

> *Pelin: I have a small number of close friends and they are all in very important places for me. I can say that without them, my social and playful personality would not emerge.*

> *Ahmet: Fear of being alone and anxiety arising from being an only child inevitably reflects on friendship relations. In order not to end friendships, I may not care about myself from time to time. In short, the state of being on the tenterhooks, which usually occurs psychologically from time to time, can inevitably be reflected in my environment.*

> *Ebru: Since I consider my friends like my siblings, I protect them very much.*

The Difficulty in Establishing a Friendship

In addition to the value given to close friendship, only children also mentioned the difficulty of establishing a friendship. The lack of peers around during the growing-up period might lead to only children interacting with adults continuously during this process. Only children may have difficulty communicating with their peers in this case. In addition, the fact that only children who grew up alone were selective in friends' relationships was also considered the difficulty of establishing a friendship.

> *Pelin: The feeling of jealousy and embrace that emerges from being the only child in the family, if the child has no peers around him, constantly communicating with older people and spending most of his time with them can be counted as his main characteristics. However, in my opinion, it is a situation that is accepted after being an only child stage.*

> *Murat: I think only children are always selective in friendships. They don't make friends with everyone. I am very selective in my choice of friends, and I cannot be a friend-confidant with everyone.*

Childhood, Adolescence and Adulthood Periods in Experiences of the Only Children

The interpretation of experiences specific to developmental periods in the context of only children's experiences is another theme. The only children compared their experiences in childhood and adolescence with those in adulthood. They mentioned the reflections of childhood and adolescence experiences to adulthood. In addition, they revealed how the differences in their lives progressed concerning developmental periods with a framework of being an only child.

A Glance at Childhood from the Point of Adulthood

Only children compared their experiences as a child with how they currently lived as an only child. They expressed the reflections of the experiences of being an only child to the adulthood process with the differences in the course of the developmental process. The differences between childhood and current experiences were highlighted in terms of being an only child.

> *Ahmet: I was freer as a child, I didn't have to plan my time, my selection of friends was interfered with. I have to be more planned right now; my friend choices are not interfered with. I am more social than when I was a kid.*

> *Melih: In my childhood, everything I wanted happened instantly, and I was loved very much. Right now everything I want is not happening right that moment or at all, but I am still loved.*

> *Asli: When I was little, I was extremely selfish in primary and secondary school years, but I no longer have such a habit. As I got older, my sharing increased more. When I was a kid, my social circle was wider. We used to play games outside all the time, but as I grew older, my circle of friends narrowed down, and I started to form longer relationships with fewer people.*

> *Murat: When I was a child, I wanted siblings less, but when I grew up, I understood this deficiency better.*

Pelin: As a child, I think I was a very quiet, insecure, introvert child. Now, although I try to overcome my introversion, my silence turns into pessimism from time to time due to not sharing with others, and I sometimes feel a partial lack of self-confidence.

Ebru: I can say that they welcomed everything because it was a period of growing up as a child. Judging by my recent age, I take care of my own things.

Sila: I was not a spoiled child whose every wish happened. But it affected me negatively that I was not going out and being very shy while growing up.

A Glance at Adolescence from the Point of Adulthood

It was stated that there were some differences in being an only child when they compared adolescence with their current life, similar to the experiences of only children during childhood and that these differences arose because they grew up as an only child and their adolescence experiences were reflections for current ones. In addition to the developmental characteristics of adolescence, the participants discussed the unique aspects of adolescent experiences as an only child and expressed how the effects of these experiences in adulthood followed.

Ahmet: I was more impulsive when I was a teenager. I would make decisions without thinking. I used to exaggerate all the emotions. I had no balancing mechanism. Now I'm more careful when making decisions, I have learned that every emotion comes and goes and should not be exaggerated.

Melih: In adolescence, when I didn't want it, I would cause a lot of conflicts. However, right now, I am not creating conflicts.

Murat: I was a very closed and shy person in high school and middle school. I would not try to communicate with different people. However, at university, I tried to surpass myself. I've known different people, I've tried to overcome my introvertness and shyness and I'm still trying to beat it. Compared to my previous periods, I can express myself better when talking to people. My communication with people is better. I'm less shy.

Asli: During my adolescence, I wanted to have a sibling more than ever, but now I have to give up my hope.

Pelin: The silence I had previously experienced during adolescence turned into irritability and emotional disorders. Now, as a result of long efforts, I try to reduce the irritability and control my feelings no matter how hard it is.

Ebru: I can say that there is strict control in adolescence, like my circle of friends, the focus was too much on me. Considering my current age and environment, I am more free.

"If You Had a Sibling" Thought

Only children formed a positive frame in their thoughts about siblings. In fact, having siblings eliminated being an only child. Mentioning this subject to determine which experienced the sibling would affect will strengthen the understanding and meaning of being an only child. In the case that the participants had siblings, they stated that they would feel less alone, emotional sharing, someone to trust, avoid extreme situations in friendship relations, learn to share, social relations will be better, something will be

good teachers, high self-confidence. The differences that the sibling brings to their lives indicated the deficiencies they experienced in the situations they were talking about.

> *Ahmet: I used less spare time for myself. I wouldn't feel alone at home. When I got upset, I would make sure to whom I had to run first.*
>
> *Melih: My approach to people could have been different. Since they are not siblings, there are times when I devote a lot of love and value and looking at every friend as a brother. Maybe they wouldn't have that much emotional charge.*
>
> *Murat: When I was little, I used to be less selfish. I could learn to share better. My social relationships would be better. I could get rid of loneliness and boredom.*
>
> *Asli: Everything would be different and beautiful.*
>
> *Pelin: (If I had a sibling) I think that I can establish more comfortable relationships with people I have just met, have more self-confidence, be more active and sociable in my social life, and make my own decisions more comfortably.*
>
> *Sila: I think it would be good for me to have a sibling and teach him something.*

Discussion, Conclusion and Recommendations

In this study, adult only children's experiences in childhood, adolescence, and adulthood and their experiences in interpersonal relationships were examined. Within this study's scope, semi-structured interviews were conducted with five female and five male participants, who were the only children of their family. Due to the focus on the participants' life experiences, this study was conducted based on phenomenological research design, one of the qualitative research methods. The phenomenon studied in this research was being an only child. In the study, the reflections of being an only child in adulthood, making sense of it by comparing it with childhood and adolescence, and dealing with the experiences that come to the fore in interpersonal interactions were examined with a phenomenological pattern.

Adult only children have interpreted their perceptions towards being an only child, the phenomenon of being the only child in the family, how their friendship experiences are shaped, the reflections of childhood and adolescence to adulthood, and their thoughts on the possible differences that siblings will bring to their lives. Within the framework of the characteristics of an only child, the sub-themes of definitions of the only child, the perception of society for the only child and the loneliness of only child have emerged. When only children define their own characteristics, they draw attention to aspects that may be different and similar to social perception. In addition, the only children especially emphasize loneliness in social and emotional dimensions. It is stated that growing alone creates a need for social and emotional support.

Another theme that emerged as a result of the study is interpersonal relationships. In the context of interpersonal relationships, only children interpreted family and friendship relationships. Only children made sense of their experiences based on focusing attention and care in their interactions with their parents. They also state that

this attention and care is a pressure factor for some experiences. It is another situation in family relationships where it is difficult to meet this pressure as an only child.

On the other hand, only children evaluated friendship relationships in two ways. The first concerns the difficulty of making close friendships due to the disadvantages of growing up alone. The second is that close friendship is valuable, based on the situations brought about by growing up as an only child. Single children have difficulties in establishing friendships, but they also consider close friendships they establish very valuable.

The fourth theme of the study states how being an only child progresses in childhood, adolescence, and adulthood. Being an only child differs throughout the individual's life cycle and these experiences affect each other. Thus, being an only child reflects the distinctive personality, social and behavioral situations throughout childhood, adolescence and adulthood. In this respect, how the phenomenon of being an only child has been shaped throughout life should be discussed.

When it comes to experiences of adult only children, their interpretations of characteristics of only children and their comparison with social perception, interpretation of the positions in family relations, care of aging parents, attachment styles to their parents and friendships, the value and meaning of friendship relations, and personality traits come to the fore (Carpenter, 2014; Garcia, 2010; Griffin, 2002). How the lives of adult only children are shaped in the processes of maintaining close friendships, establishing close relationships and having children are also considered as topics that require answers. In addition, the responsibility taken in the care of aging parents and how the grief process proceeds after their loss come to the fore within the case of adult only children (Sorensen, 2008). In this study, in the light of all these, how adult only children make sense of and interpret their lives were examined and how adult only children made sense of their experiences was evaluated.

In this study, while others' perception and the characteristics of only children were expressed by their own definitions, negative characteristics were mentioned. It was stated that only children were asocial and incompatible and did not know how to share, but the participants evaluated themselves far from this perception. The idea of being selfish, spoiled, lonely, asocial and incompatible for only children is expressed in every field. This idea is found in birth order research (Eckstein, 2000; Nyman, 1995). However, these ideas about only children seem to remain controversial in the light of scientific research. This study examines how only children make sense of their lives based on these discussions. As a result of this research, only children interpret their lives in a different way from the perception of others and approach them more positively. They state that they experience negative traits as much as any child. In this process shaped by the approach of the family and the environment to children, more efficient evaluations can be conducted by combining what the only children think, feel and experience and how the environment perceives it.

Polit and Falbo (1987) state that various mechanisms are involved during only children's personality development. These mechanisms are sibling absence, uniqueness of being an only child, and parental interest and closeness. When evaluated concerning sibling absence, it is stated that only children cannot develop the social skills. Thus, they cannot establish positive peer relationships. Moreover, it is also claimed that only children are weak in terms of social cohesion and cooperation since they do not have siblings. On the other hand, it is stated that these views put forward for only children cannot be confirmed; on the contrary, only children are not different from those who have siblings in terms of social cohesion, cooperation and peer relations (Poston & Falbo, 1990). As a matter of fact, in this study, only children stated that they had a small number of close friendships and that they found these close friendships very valuable. On the other hand, only children who associate growing up as an only child with loneliness also pointed out the difficulty of making friendships.

One of the prominent themes of this study was the experiences of only children, which attracted all their parents' attention, that interest was not divided and concentrated on a single focus. Besides, it was seen that the excessive expectation of parents put pressure on single children and they could not feel autonomous. The fact is that, single children feel under pressure due to excessive expectations leads to a decrease in the psychological autonomy attitudes perceived by the family (Byrd, et al., 1993). In addition, this extreme approach of parents leads to greater responsibility for single children or at least only children state a greater sense of responsibility (Pitkeathley & Emerson, 2011). In this study, they expressed their satisfaction with being the focus of their parents' attention. On the other hand, when the expectations of the parents were excessive, the only children stated that they felt under pressure.

In addition to the parents' approach, it is stated that the only children who do not have any sibling interaction during childhood have difficulty in social relations (Downey et al., 2015). It is stated that sibling relationship is one of the most important sources in which emotional and social skills are learned and experienced (Downey & Condron, 2004; Kramer, 2014). An only child's inadequacy in social skills may cause difficulties in establishing and maintaining friendships. On the other hand, studies are indicating that only children are not more inadequate concerning social skills than siblings (Chen et al., 1994; Fussell et al., 2005). In this study, they mentioned the possible differences that only children will have in having siblings. The only children stated that if they had siblings, they would feel less alone, they would create a sharing environment with their siblings, they would have better social relations, they would learn to share, and it would be good for them to teach their siblings.

Being an only child has its own unique life experiences. In this regard, when comparing only children with children with siblings, it would be more appropriate to consider being an only child with its specific processes rather than evaluations at the positive and negative ends. Rather than qualifying the social perception towards only children negatively, it should be evaluated with a perspective concerning the experiences specific to an only child. In educational settings, psychological counselors, teachers, administrators, and parents may need to develop an awareness of only

children's life processes and specific features. Thus, this awareness can contribute to fulfilling the inner and social needs of only children.

Experiences of only children should be discussed from different perspectives with quantitative, qualitative and mixed-method studies. In this context, the following can be suggested as a suggestion for studies to be conducted: When the experiences of being only children are evaluated in terms of their life periods, it can be investigated which situations come to the fore in late adulthood and old ages. In addition, how the phenomenon of being an only child progresses during the parenting process can be examined. The prominent factors in the relationship of individuals who grow up as only children with their children can be evaluated.

This study was conducted with adult only children between the ages of 20-26. In this study, equal representation power in terms of gender and representation of different socio-economic regions is provided. Adulthood experiences are limited to early adulthood. In addition, the participants are people who attend university or have a university degree. Based on these limitations, individuals' experiences in middle adulthood and late adulthood as an only child can be considered in future studies. In addition, studies can be conducted with individuals from different education levels to make sense of being an only child.

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Vital Problems of Primary and Secondary Schools and Solution Suggestions: A Qualitative Analysis Based on the Opinions of School Administrators[*]

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Abstract: Based on the opinions of school administrators, this study aimed to identify the vital problems of primary and secondary schools and suggest solutions to these problems. It was designed with a multiple case study method from qualitative research approaches. The study group consisted of 35 school administrators working in primary and secondary schools in Tokat province in the 2016-2017 academic year. The data were collected by interview technique. During the interviews, demographic information about school administrators as well as information on the problems of schools were collected. The data were analyzed by content analysis technique. In data collection, processing, and analysis processes, measures to increase validity and reliability were taken. In the research, 38 problems were identified under five themes related to the problems experienced in primary and secondary schools. Twelve of these problems were found to be of "vital" importance. The first three of the vital problems of the schools in the study group were 'lack of funding for schools', 'insufficient physical infrastructure of schools', and 'parents lack of interest in school'. It is recommended that the Ministry of National Education pays attention to the voices coming from the schools, reestablish the balance of authority responsibility, switch to school-based budgeting, and allocate funds to each school.

Keywords: Primary school, secondary school, problems of schools.

Introduction

School is one of the most important organizations people have established. What makes the school important is the tasks it undertakes. According to Başaran (2008), the task of schools is to ensure the survival of the nation together with other social institutions and in partnership. In this task, it is up to the educational institutions to ensure the socialization and acculturation of the members of the society, prepare them for social change, develop social relations, and equip every member of the nation with production skills. There are a number of educational needs that a person must satisfy in order to survive as human. The school is expected to meet these needs and transform human potentials into competences. These organizations, which prepare individuals for the future, are not institutions that maintain their existence solely through their contribution to individual goals. In addition to the individual contributions of the school, the main factor that ensures its institutionalization and dissemination is its contribution to the continuity and existence of societies. As a matter of fact, in the background of the spread of the right to get education, which has been shaped in the historical process and considered as one of the basic human rights, is this social drive (Aslan, 2017). As states realized the role of education in the production process, they have made at least some of the education they offer to their citizens compulsory. Today, not only for economic reasons but also due to changing individual, social, and cultural needs or political reasons the duration of compulsory education is prolonged.

Of course, the social, cultural, political, and economic functions of education have been determinant in the spread of education and the access of educational institutions / schools to the most remote settlements. Although education has existed since primitive societies, the association of the above-mentioned functions with educational institutions is new. It can be said that today's educational institutions and the functions expected from these institutions are the result of two important revolutions that came to the agenda in the second half of the 18th century and their effects have continued until today. The first of these is the Industrial Revolution. The revolution has largely shaped the economic function of education. Since this date, the strong connection that education has established with the economic system has been an important reason for the massive growth of education and the spread of educational institutions (Aslan, 2017). The second is the French Revolution. With the revolution, the emphasis on individual rights over the principles of *freedom*, *equality*, *fraternity* (Ercan, 1998, p.59) and the expectation from education to create national consciousness determined the political and social functions of education.

These functions caused countries, especially developed countries, to allocate significant resources to education, starting from the period following the Second World War (Adem, 1993; Ansal, 1997; Karakültük, 2012; Ünal, 1996). In this period, it is seen that the emphasis of educational economics theories on the provision of education also increased. Starting from the Human Capital Theory since the 1960s, the emphasis on the fact that the return on education investments in people is often more than physical capital investments has been one of the reasons for both countries and individuals to

turn to education. Especially since the mid-1960s, studies that calculate the returns of education to individuals and society have increased (Hesapçıoğlu, 1984; Ünal, 1996; Serin, 1979). On the other hand, the increase in the expectations of individuals and states from education and the fact that the resources allocated to education constitute a significant part of the national income have brought up the discussions on how much schools can achieve their goals.

These debates have led to the development of different audit approaches that evaluate educational organizations from within or outside. Questions such as how far educational organizations can achieve their goals, how this can be achieved better and which indicators should be based on the evaluation have become important for all countries. Schools are organizations where educational goals are tried to be achieved, and they offer / are expected to offer individuals experiences in line with these goals. The main indicator of the achievement of the school's goals is associated with the level of meeting individual and social needs and providing individuals with basic skills. (Balcı, 2014; Başaran, 2008; Berberoğlu & Kalender, 2005; Bursalıoğlu, 1991; Education Reform Initiative [ERG], 2009; TEDMEM, 2016). Revealing the existing potential of each individual, developing and transforming it into competence; raising people in accordance with the expectations of the economic, political, and social systems are among the social goals of education. On the other hand, these institutions, which have both individual and social aspects, have been the focus of interest or criticism of the society in all periods due to their functions. In addition to the ideological criticism of the school (Althusser, 2006; Apple, 2004; Bourdieu, 2015; Bowles ve Gintis, 1996; Freire, 2010; İnal, 1996, 2004; Ünal, 2005), the criticisms made on the level of realizing the goals of schools (Gardner, 2008, p. 82; Schlechty, 2014), predictions that the current forms of schools will disappear in the future (Ellis, 2005; Hesapçıoğlu, 1996; Tezcan, 1998), or the discussions on the non-school society (Illich, 2006) are some of these.

Leaving aside the discussions on an unschooled society, it is possible to put the criticisms directed at the school in two groups. The first group of criticisms concerns the ontological existence of schools. These are the thinkers who express that the system must be changed in order for schools to achieve their goals, and who deal with school or education in relation to the capitalist system. It is the criticisms that argue that it is not possible for the school to develop all aspects of the individual in the capitalist system and that education, as such, cannot liberate the individual (Althusser, 2006; Apple, 2004; Bourdieu, 2015; Bowles ve Gintis, 1996; Freire, 2010; Kurul, 2019; Mayo, 2012). Hence, they are systemic criticisms. The second is in-system criticism or evaluations of what needs to be done in order to make schools more effective and achieve the intended goals. The most important of these is effective school research (Balcı, 1988; 2014; Clark, Lotto ve Astuto, 1984; Cohn ve Rossmiller, 1987; Hesapçıoğlu, 1991). Criticism or evaluations made over the reflection of technological developments, economic, or social changes on the school / education constitute an important place in criticism within the system (Schlechty, 2014). In this context, the criticism of the school is based on the fact that the functions and operations of schools

cannot be considered independent of scientific, technological, and social changes; therefore, educational institutions should be sensitive to these changes. According to Başaran (2008), society can neither be with school nor without school. It is impossible to apply some of the criticisms directed at the school; others suggest establishing schools of different nature. It is natural to criticize the school like any other social unit. All these criticisms are also necessary to create a better educational relationship and interaction pattern in society.

Schools today face a series of changes and transformations from their functions to their operations. According to Schlechty (2014), there has probably never been a period in history in which social changes have had such a strong impact on schools today. In order for schools to cope with this change, they must deal with a range of variables from the way they are managed to organizational structures, from forms of financing to their relationships with parents. Moreover, according to Faubert (2009), schools are increasingly held accountable to more and more educational authorities and the wider community they belong to (parents, students). This requires continuous evaluation of the activities in schools in order to improve them, and at the same time being accountable to the society for the public resources it uses. As a matter of fact, when the national and international literature is examined, it is observed that the studies on evaluating, developing, and accountability of schools have increased. It can also be said that cultivated school research constitutes a considerable amount of literature, especially in the context of school development studies (Anderson, 2005; Balcı, 2014; Clark , Lotto ve Astuto, 1984; Cohn ve Rossmiller, 1987; Faubert, 2009; Plowright, 2007; Saunders, 1999; Şahin, 2006; Turan ve Zıngıl 2013).

Today, schools are going through a process in which 'school-based management' forms, in which school components have the word and authority, come to the fore, rather than being units managed and directed only by central administrations (Apple & Beane, 2011; Balcı, 2014; Schlechty, 2014). From the systems point of view, the school is the basic system. The intermediary is the reason for the existence of the upper systems and the upper system. When the basic system disappears, the reason for the existence of the intermediary upper systems - the provincial and district organizations - and the upper system - the central organization - also disappears (Başaran, 2008). For this reason, it can be said that efforts to improve education should start with the basic system or should focus on the basic system. Meanwhile in Turkey, in the center of educational policy-making process, it is also known that the main system actors are far from their views and suggestions. This can lead to the result that educational policies are sometimes far from the reality or problems faced by schools. This situation points to the incompatibility of policy and practice; thus, it can mean that prescriptions written to schools from the center are not obeyed. In such a structure, training employees are reduced to technicians who follow the instructions of the upper system, and their discretionary power is removed. However, according to Bursalıoğlu (2004), the main guide of the school administrator should be professional values system and legal principles. As a matter of fact, in the school-based management approach, it is aimed to create a psychological sense of ownership by giving teachers and administrators

more responsibility and discretion. Thus, it is assumed that education employees will become stronger and they will make more effective practices in schools as a professional value system will form (Walberg, 1992 cited in Balcı, 2014).

In the literature, there are various studies or evaluations on the problems that directly or indirectly concern the school. A significant portion of the studies examining the problems of schools are conducted with a quantitative approach. It is seen that it is examined within the framework of the reasons determined by the researcher based on the literature (Akça & Yaman, 2009; Çınkır, 2010; Demirtaş, Üstüner & Özer, 2007; Göksoy, Emen & Aksoy, 2013). This may mean limiting the answers of the research participants to the point of view of the researcher. On the other hand, it can be said that this problem has largely been overcome with the use of qualitative methods mainly after 2010 in studies on the problems of schools (Akbaba & Turhan, 2016; Aktaş, 2018; Aslanargun & Bozkurt, 2012; Hoşgörür & Arslan, 2014). In a significant part of the studies on the problems of the education system or schools, problems are listed as lack of system integrity and lack of consideration of their relationship with higher systems. However, it is seen that this has been exceeded in a limited number of studies (Deveci & Aykaç, 2019; Karakütük & Özbal, 2019). This research differs from the literature for three reasons. Firstly, while creating the themes, the duties of school administrators were taken into account. Each of the task areas has been accepted as a theme. In this way, instead of presenting an independent set of problems, it was aimed to show the weight of the problems in the school administrators' areas of duty. Second, a methodological diversification was provided in the research. Although the research was carried out with a qualitative approach, it was aimed to guide those who direct the education policy by determining the vital problems of the schools with the Pareto analysis. Third, different from the majority of the studies on the subject in the national literature, the opinions of the administrators regarding the solution were also determined. In addition, it was determined which system or systems were within the jurisdiction of the solution proposals within the framework of the current legislation and based on expert opinion.

The purpose of this study was to determine vital problems of primary and secondary schools and suggest solutions for these problems based on the opinions of school administrators. It is meaningful to define the problems faced by school administrators, one of the most important actors of the basic system, from the primary data source. It is essential not only to define these data, but also to develop policies starting from and towards the school. School is the basic system. All other educational systems exist for the basic system. Therefore, the change in Turkey that started from the development of the education system and schools have an understanding of the need to change thinking and problem-solving oriented school. It is hoped that the research will contribute to this process.

Method

This study, aimed to determine the vital problems of primary and secondary schools and suggest solutions for these problems based on the opinions of school administrators working in public schools. It was designed with the multi-case study method as one of the qualitative research methods. Case studies are a type of research that seeks answers to how and why questions about a current situation under study, and provide in-depth data collection for the researcher (Yin, 2014 as cited in Akar, 2016). In this study, this method was chosen because the problems faced by the schools were determined in depth and answers were sought for how and why questions.

Study Group

In this qualitative study maximum diversity sampling was preferred as a purposeful sampling method. The aim here is to create a relatively small sample and to reflect the diversity of individuals who may be a party to the problem studied in this sample (Yıldırım & Şimşek, 2018). Personal variables such as seniority, gender, and age were taken into account when determining school administrators. In addition, it was ensured that the schools where the administrators worked were at different levels (primary and secondary schools), different settlements (village, district center, city center), and different socio-economic environments (lower-middle-upper). In this way, it was aimed to capture diversity in terms of schools and therefore the problems experienced. Accordingly, 35 school administrators (school principal or vice principal) working in primary and secondary schools in Tokat in the 2016-2017 academic-year constituted the study group of the study. Personal information about school administrators is given in Appendix 1.

Data Collection

Data were collected through interviews. For this purpose, an interview form consisting of semi-structured questions was developed by the researcher. While preparing the interview form, three experts from the field of educational sciences were consulted, and a pre-trial was made with the principals of two schools outside the study group. After these applications, the form was finalized. In the semi-structured form, there are ten questions, eight for determining the demographic characteristics of school administrators and two for determining the problems experienced in schools and solution suggestions. The interviews were conducted by visiting schools in April-May 2017. 16 of the school administrators did not allow voice recording, and these interviews were recorded by the researcher. 19 interviews were conducted by taking audio recordings. Interviews were completed in the 30-40 minute interval. During the interview, the school administrators were asked "What are the problems you encounter in your school?" Eight questions were directed to determine demographic information as well as "What are your suggestions for solutions to the problems you encounter in

your school?". To deepen the interviews, "Can you explain this problem a little more?", "What do you mean by this?" "Is it possible for you to exemplify?" questions.

Data Analysis and Interpretation

The data obtained in the research were analyzed by content analysis technique. A total of 22-hour interviews were held with 35 school administrators, and the tape recordings were deciphered by the researcher and transformed into an interview text of approximately 105 pages. The texts were classified and organized according to the answers given to the guiding questions. Legislation and literature were used while creating themes. In the literature, it was seen that there is a general consensus regarding the duties of education administrators. Accordingly, the duty areas of education managers are: 'management of training programs', 'management of student affairs', 'management of employee affairs', 'management of support affairs and budget'. Therefore, themes were created based on the problems experienced in these areas in the research. Problems that were not covered in any of these areas were given under the 'Other' theme.

As the last step of the analysis phase, the themes and sub-themes obtained were presented to the opinion of an expert on educational sciences and qualitative research, and inter-coder reliability analysis was performed on the themes obtained. Reliability = [Consensus / (Consensus + Disagreement)] X 100 formula (Miles & Huberman, 1994) was used in this process and the reliability level between coders was calculated as 86.8%. In addition, it was determined that which system (s) (basic system, intermediary upper system and upper system) were within the jurisdiction of the suggestions expressed by school administrators. Expert opinion was also used when determining the responsible systems. First of all, the solution suggestions expressed by the school administrators were listed, and based on this list, both the researcher and an expert from the field of educational sciences made separate codes for the authorized system (s). At the last stage, these codes were compared and the percentage of compliance was calculated for the responsible system (s) that will make solution proposals. Accordingly, in four of the thirty-three items, there was a difference of opinion. The percentage of compliance was 87.9%.

Pareto analysis was conducted in order to determine the "vital" (Balcı, 2000) problems of the schools within the scope of the research. Pareto analysis is an analysis that helps to find the most important factors by ranking the data on a particular subject from the highest frequency to the lowest. According to the analysis, 80% of the causes of a problem show vital causes while 20% show other causes (Karuppusami & Gandhinathan, cited in 2006. Küçüker, 2018a). Pareto analysis is a widely used approach in decision-making processes in the field of management (Aktan, 2012). The following steps were followed in using the technique. First of all, the themes and sub-themes determined based on the content analysis were ranked in descending order according to the frequency of repetition, and the cumulative sums and cumulative percentages were calculated. Based on these calculations, the Pareto chart was drawn

and the 80% limit was shown in the chart. The problems in the area where the cumulative percentage reaches 80 in the graph are considered as vital problems of the schools within the scope of the research.

Precautions Regarding the Validity and Reliability of the Study

In qualitative research, validity is related to the accuracy of scientific findings, and reliability is related to the repeatability of scientific findings (Yıldırım & Şimşek, 2018). Accordingly, some measures have been taken to increase the validity and reliability of the study. These are: (i) While developing a semi-structured form to increase the internal validity (credibility) of the research, the relevant literature was examined. At this stage, a pre-interview was held with two school administrators, and these opinions and expert opinions were used while finalizing the form. In addition, within the scope of the study, the purpose of the study was explained in order for the school administrators to express their opinions sincerely without any worry or fear, explanations were made to eliminate the anxiety of the administrators who did not want to be recorded, but the interviews with the administrators who did not want to be recorded were made by taking notes. After the interviews were deciphered, participant confirmation was received. At this stage, the findings were summarized and presented to the participants, and a confirmation meeting was held. In addition, the participants were asked whether there were any statements they would like to add or remove regarding the interview texts. In order to increase the credibility of the research, a methodological variety was provided. The findings obtained from the thematic analysis of the interview data were analyzed with different techniques (content analysis, Pareto analysis and graphing), and diversity was strengthened. Thus, it was tried to be ensured that the data collected during the interview process reflected the real situation. (ii) In order to increase the external validity (transferability) of the research, the research process and what was done in this process were explained in detail. In this context, the research model, study group, data collection tool, data collection process, data analysis, and interpretation were described in detail. In addition, in order to increase the external validity of the research, it was tried to provide maximum diversity in the study group. Particular attention has been paid to include schools that accept students from different socio-economic environments, are located in different residential areas, and have different levels (primary and secondary schools). (iii) In order to increase the internal reliability (consistency) of the research, all of the findings were given directly without comment and supported by direct quotations from the opinions of the participants. In order to increase the reliability of the study, expert opinion was used at every stage of the research (preparing the semi-structured form, checking the data transferred to the computer environment, creating themes and sub-themes, and deciding on responsible systems). In addition, a faculty member working in the field of educational sciences and experienced in qualitative research methods made coding independently of the researcher, and by comparing the codes, the agreement percentages were calculated. (iv) A detailed description has been made to increase the external reliability (verifiability) of the study. Findings were written in detail, participant codes were

arranged and presented in a way that allows to check the consistency of the data in the findings section.

Findings

In this section, the findings obtained from the analysis of the data collected in line with the purpose of the research are presented without comment. In the presentation of the findings, first the problems experienced in schools are given under themes, then each theme with its sub-themes. In the following section, the problems of the schools were examined by Pareto analysis based on the views of all participants to identify vital problems. Finally, the responsible system (s) that are expected to be solved by school administrators with solutions to the problems of schools have been determined.

Findings Concerning the Problem Areas of Schools

In the research, primarily the problems of primary and secondary schools were identified in order to identify vital problems. Accordingly, it is possible to group the problems experienced in schools under five themes (Figure 1).
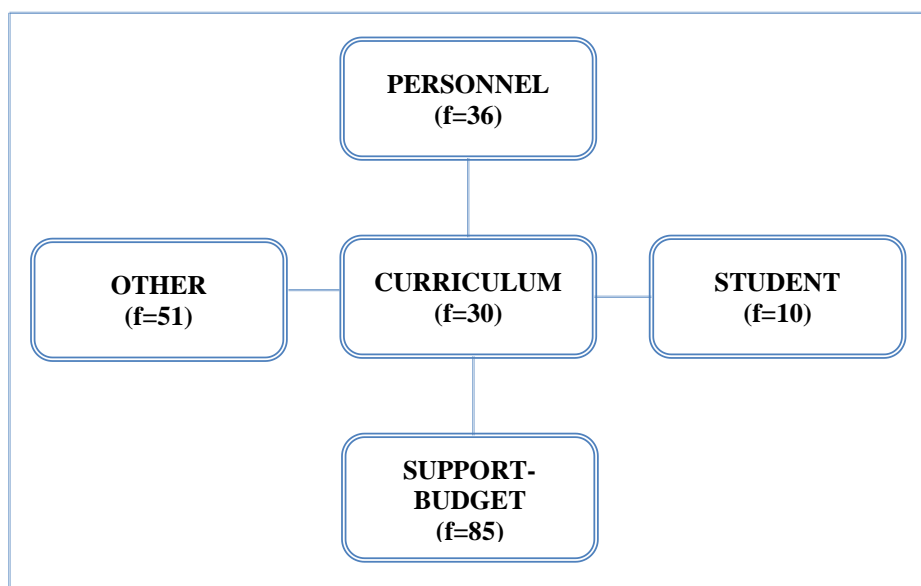
Figure 1. Problem areas of schools

As seen in Figure 1, problems related to support and budget affairs (f = 85) were experienced mostly in primary and secondary schools, and problems related to student affairs were experienced at least (f = 10).

Problems encountered in support and budget work in schools

According to school administrators, the problems faced by schools in support and budget matters are given in Table 1. Accordingly, the main problems faced by schools

are the lack of budgets and the fact that MoNE does not allocate funds for schools (Table 1). 33 of the thirty-five participants stated that the schools' lack of budgets was the first problem area. Some of the expressions of the participants gathered under this theme are as follows (Three dots in square brackets […] indicate the expressions that are not included here, and the texts show the expressions changed by the researcher).

> *Our economic problems are huge, especially in primary education, high schools have budgets sent by the state. But in primary schools, including this primary school and secondary school, unfortunately there is no budget for both. The state only covers the electricity, water, and fuel costs of the schools. Other than that, it does not support in any way. It is forbidden to collect school fees anyway. Recently, sports money had been collected, and they were banned. Therefore, our hands are completely tied. In no way, the parents voluntarily bring or give us money. But imagine a lot of problems every day in a school with 1700 students; There are many places that are broken and destroyed. Maybe dozens of door handles change every day, to say the least. Believe me, we can't even afford photocopying. That way, the troubles are huge economically. […]. (P20, Male, Principal, Middle School)*

School administrators mentioned the lack of infrastructure, equipment, and materials as well as budget problems. One of the managers stated the following.

> *Physical problems are too many. Children's playground is very limited. School gardens are usually very small, as schools are in the city center, where children can throw off their energy, and space is limited, especially since children of this age are at full play age. In fact, our biggest problem is that we wish there was a gym in every school. […] Children need to throw their energy in places like gymnasiums. Physical problems are a lot, as we said. It doesn't end with counting. (P5, Male, Principal, Primary and Middle school)*

Another school principal mentioned that although the central school is in particular, the lack of material is also at an advanced level.

> *First of all, physical problems come first. Indeed, the situation of schools and classes is deplorable. Classrooms are too crowded, insufficient, we cannot say anything technologically anyway. Because even a computer or a projector is a luxury in the class. None, so in most classrooms we don't even have the most basic technological tools. There aren't even basic items. Even the simplest of maps cause a lot of trouble. (P16, Male, Asst., Middle School)*

Table 1.

Problems Encountered by Schools in Support and Budget Affairs

Code Problems	Sub Theme	Sample expressions
SB1	Schools lack of funds	P1- "Primary schools primarily have financial problems. No allowance is given except for Imam-hatip secondary schools. " P9- "The biggest problems are economic problems. Such a problem occurs because there is no allowance directly from the National Education."
SB2	Inadequate physical infrastructure of schools (classrooms, laboratories, sports halls, dining halls, libraries,	P6- "The school where I work is a transport center school. Students come to our school from seven transportation centers. However, we do not have a cafeteria. The physical condition of

	gardens, etc.)	*our school is not suitable for the transportation center. "* *P27- "Currently, our school does not have a laboratory. It has no library. In general, I can say that these problems are 80% of the schools in Tokat, there are similar problems."*
SB3	Equipment, material, and technological deficiencies	*P19- "The material deficiencies of the servants are too much. Let's say you need a sphere. You want a sphere from the province, no. We are trying to find from other schools. "* *P28- If you ask "Are the schools suitable for education? Yes, we only have classes in our dry building. There is no area where students can be active, do social activities, there are no materials. The Fatih project may solve this problem, but the current situation of the schools is deplorable."*
SB4	The current class to be crowded	*P22- "Our main problem is that the classes are too crowded, the schools are physically inadequate."* *P26- "The classes are too crowded. Normal education is required. But here the conditions of the country are not ready for this."*
SB5	Having primary and secondary schools together	*P7- "As we took in many parts of Turkey's current middle school and elementary school combined the same garden, using the same building. This poses a big problem. "*
SB6	Inequalities between schools	*P35- "I have been working as an assistant manager for 32 years. I've seen a lot, but one of the things that really upset me is inequality. While some of the schools have all the facilities, it saddens me that some don't even have water. "*
SB7	Parents not wanting to donate to the school	*P1- "Parents refrain from donating to the school. The most important reason for this is the politicians saying "do not donate to the school". Unfortunately, this puts us in a very difficult situation. "*

Some school administrators mentioned that the class sizes were too crowded. One of the participants stated the following.

> *Let me tell you about the primary school because I work in primary school. Personally, our physical facilities are very insufficient. Let me say it for my own school. Our classes are small, our students are very crowded for now, we are in a region that constantly receives immigration due to the constant new construction. This situation makes it difficult for education to reach its purpose. (P12, Male, Asst., Primary School)*

With the start of twelve-year compulsory education, primary schools have been separated into primary and secondary schools. However, in this process, some schools were used jointly in many provinces due to lack of infrastructure. As a matter of fact, two school administrators (P2, P7) stated that this was an important problem. It is

observed that the participants talked about the problems experienced in the use of the same spaces, especially by children with different developmental levels.

> *Many secondary schools and primary schools use the same garden and the same building, and this is a big problem. Just as a boy was running, he fell suddenly and hit a little boy. It causes such injuries. Minors and big ones should be separate. Minors can take negative behaviors of adults as an example. (P2, Male, Asst., Middle School)*

On the other hand, some school administrators mentioned that there are significant differences between schools in terms of environment and facilities and that these differences, combined with the differences arising from the socio-economic level of the parents, deepen the inequalities between schools. One of the participants stated the following.

> *[…] The high-quality difference of schools and inequalities between schools are another problem of education; There are very good schools, very bad schools. I say it in this sense: schools that have made a name in some way and stayed in the city center are more supported. Families with a good socio-economic level send their children to these schools. When the aside schools like ours lose the good students in their regions to these schools, a huge difference in academic success emerges. Inequalities become irreversible when combined with the environment, possibilities and parent profile. The first priority should be to eliminate this problem in Turkey cliff. Otherwise, the exams will change, but the results will not. (P33, Male, Principal, Middle School)*

Problems encountered in curriculum affairs in schools

In the education system it creates, the state transforms the behaviors it wants to see in the people it will train into an education curriculum and sends it to schools. The main function of education administrators is to manage the education curriculum. Other functions of management exist to support the implementation of the education curriculum. Every activity to be done at school to realize the aims of education is a part of the education curriculum (Başaran, 2008). Therefore, it can be said that all of the problems experienced in schools directly or indirectly affect the implementation of the education curriculum.

Although all of the problems encountered in schools affect the education curriculum indirectly, under this theme, direct problems affecting the implementation process of primary and secondary school curricula were given. Education administrators mentioned eight problems under this heading. Accordingly, the problem most frequently mentioned by school administrators was the frequent change of the education curriculum. Two of the participants stated the following.

> *[…] Another problem is the constant renewal of the curriculum or legislation. As the teachers say, something else comes out without getting used to one in general. It's hard to keep up with the pace. As such, we cannot provide a standard. There is no order. (P27, Male, Principal, Primary School)*

> *Since our education system and education policies are permanent and not permanent, it is seen that the most important problems stem from this. The exam system has changed five times in the last 10 years. So, it's a really big problem that such a general system changes the exam every two years. The students do not know which system to use to prepare for the exam. Students' motivation is also declining. Because education is a process, even the worst system should be tried for at least 5-10 years so that its deficiencies are fully seen. Like a puzzle. (P7, Male, Principal, Middle School)*

Some school administrators mentioned that especially the secondary school curriculum was intense. These participants emphasized that the curriculum was not suitable for the developmental characteristics of children in its current form.

> *Although our curriculum has been updated recently, I think it is heavy. I think 35 hours of lessons per week is too much. Because primary school children are more play-age children, I think that being subjected to a 35-hour curriculum at school prevents them from living their childhood. (P6, Male, Principal, Middle School)*

Table 2.

Problems Encountered in Curriculum Affairs in Schools

Code Problems	Sub Theme	Sample expressions
C1	Frequent changes in the training curriculum	P3- *"Curriculum changes in developed countries are being piloted. You also look at us, the system has changed overnight. […] It was neither done in eight years of uninterrupted basic education, nor in 4 + 4 + 4. Applications were made oppressive. "* P11- *"In general, we cannot read a book we publish for years. Does science always change, brother? Are the molecules changing? Pasteur changing? Are general theories changing? In my opinion, it should not be tampered with with such curricula, subjects and systems. "*
C2	Intensive training curriculum	P18- *The teachers cannot train the curriculum due to its intensity. "* P30- *There are studies on the curriculum. I know it closely. I don't want to comment without seeing it, but they eliminated it 2-3 times, still heavy. We are trying to fill the minds of children with all the necessary and unnecessary. This causes distress in children. "*
C3	Early school starting age	P21- *"Admitting young children to school is a problem. The Ministry made a regulation, left the sending job to the permission of the parents. The consciousness level of the guardian is certain. Children in that age group [60 months] are still being victimized. "*
C4	Failure to equip students with life skills	P17- *"The most important problem is that schools cannot provide children with life skills. We have a system disconnected from life "*
C5	Multigrade class implementation	P4- *"In a school with multigrade class, since I am the principal teacher, I teach 3rd and 4th grades together. Therefore, we do it with homework and teachers. I devote two hours to a subject that a school in the center devotes four hours to. At first, we have trouble with this. "*
C6	Double shift schooling	P20- *"There is no classroom, so double shift schooling started. Double shift schooling training is a problem in itself. The children start at 7:00 in*

		the morning and end at 18:00 in the evening. It is a problem for those who start early and for those who come out in the evening."
C7	Frequent changes in the exam system	*P22- "As educators, we have difficulty following the regulations regarding the examination system in our country. You exist, you account for the parent."*
C8	Exam-oriented education system	*P6- "When this is the success evaluation criterion of schools [exam] What is the average of the school in the TEOG exam? How many students did you send to the science high school? […] Schools have to reflexively focus on this issue both as administrators and teachers."*

School administrators mentioned many problems that directly affect the achievement of the goals of educational programs, such as the young age of starting school, the inability to teach students life skills, multigrade class implementation, double shift schooling, frequent changes in the examination system, and the education system being exam oriented.

Problems encountered in personnel affairs in schools

It is seen that a significant part of the problems under this theme were problems that do not stem from the internal dynamics of the schools and that it was often not possible for the school to produce solutions. According to school administrators, teachers' professional inadequacies were the leading problems of schools arising from their education employees. Other problems expressed under this theme were the inadequacy of the number of teachers or support staff, the high level of burnout of teachers, the employment of substitute teachers, the decrease in the social reputation of the teaching profession, the limited authority of the school administrators, the increase in grouping among teachers, and the lack of staff security of school administrators. Some of the managers' views under this theme are as follows:

> *When some of our teachers come to our schools as teachers, they are not equipped to teach students effectively. Our teachers who have been appointed due to reasons arising from the faculty they study in and their individual deficiencies such as not completing their internships have professional inadequacies. The level of readiness is not appropriate. […]. (P11, Male, Principal, Middle School)*

> *When we go to schools, the product grown by universities, including us, we are in a very bad situation. We are not trained enough, we fail in many areas. […]. (P22, Male, Principal, Primary School)*

Table 3.

Problems Encountered in Personnel Affairs in Schools

Code Problems	Sub Theme	Sample expressions
P1	Teachers' professional inadequacies	*P18- "Teachers generally use the method of direct instruction, cannot put the knowledge obtained in theory into practice."*

		P13- *"Teachers do not feel the need to renew themselves. Anyhow, there is an established order, I have classes given to me, I have guidebooks. There is no need for this. This is a problem in itself. "*
P2	Lack of teachers and support staff	P4- *"School cleaning, garden, maintenance of buildings all fall to teachers. We are experiencing difficulties with the staff to make them work. The villagers have no time to help us as they have to work a lot in the fields. We only have the support of a few parents. "* P10- *"Due to the high number of students in schools, class sizes are increasing every year. Parallel to this, the number of teachers should increase."*
P3	High burnout levels of teachers	P13- *"[…] When we come to the education and training dimension, especially the level of burnout of our teachers exhausts us."* P31- *"The burnout levels of teachers are high. Let me put it this way, after working their twentieth year, there is an extinction in teachers. They both have difficulty being motivated and are also exhausted "*
P4	Substitute teacher employment	P35- *"Another problem is the substitute teacher. What is a substitute teacher, a situation I cannot understand. Don't be a shepherd for God's sake! […] These things do not work like this, it has an education, a process."*
P5	Decreasing social prestige of the teaching profession	P2- *"Another important problem is the loss of prestige and attempts to devalue the teaching profession due to both political and social approaches."*
P6	The limited authority of school administrators	P31- *"A lot falls on our school principals. Here, our Ministry needs to authorize more school principals."*
P7	Increase in groupings among teachers	P3- *"Grouping in schools has increased. There was a great degree of grouping in the school where my wife, the teacher, and my wife work. It is said to be the same in other schools."*
P8	School administrators lack staff security	P3- *"With the law numbered 6528, the staff guarantee of school administrators has been removed. School administrators do not feel safe in terms of administration right now. That's the first problem."*

Another problem experienced in schools was the lack of teachers and support staff. Although the requirement for teachers differed according to schools, the lack of support personnel was a particularly common problem. As a matter of fact, observations made in schools did not include this problem; however, during the interviews this problem was at a higher level than stated. On the other hand, while temporary solutions such as employing contracted personnel for the support personnel problem and getting support from parents in village schools were applied, it was more serious that there was a need for teachers in some branches. Regarding the need for teachers in their schools, two of the administrators stated the following:

Although it differs according to schools, the need for teachers, civil servants, and especially attendants is at a high level. For example, cleaning is very important, but I don't have a cleaning staff where there are so many children. […]. (P21, Male, Principal, Primary School)

Especially our lack of teachers is a serious problem. Especially in Guidance and English branches. We have nearly two thousand students in our school and only one counselor teacher. So, what can a counselor do with so many students? It does not exist in other districts and villages anyway. This is a serious problem. Because children at this age definitely need guidance. (P17, Male, Principal, Primary and Middle School)

Some school administrators mentioned that teachers' burnout levels were high. One of the managers stated the following:

[…] First of all, the years of seniority of the teachers working in our school are 13-14 years, so they are not very old. But there is a great number of burnout of teachers due to some practices in the country. […] Unions play an excessively active role in the appointment of school administrators, and the reflection on teachers is mostly due to the idea that people who are close to political power are assigned to work, and the thought of discrimination or not performing the assigned duties increases the level of burnout of teachers. […]. (P3, Male, Principal, Primary School)

On the other hand, problems such as meeting the teacher needs of schools with substitute teachers, decreasing the social prestige of the teaching profession, limited authority of school administrators, increase in groupings among teachers, and lack of staff security of school administrators are other problems faced by administrators regarding employee services in schools.

Problems encountered in student affairs at schools

In this study, the least expressed problems by the participants in terms of both the frequency of repetition and the variety of problems they expressed were those related to the students. There could be two reasons for this situation. Firstly, the problems to be encountered in primary and secondary schools regarding student affairs may be relatively simple compared to other levels, and secondly, the authorities of school administrators regarding student affairs may be more in number than other fields. School administrators expressed seven different problems under this theme. These were; lack of deterrence in disciplinary punishments, difficulty in maintaining discipline in dress, low socio-economic level of students, inability to direct students according to their interests and abilities, lack of education of children from the village, adaptation problems of bussed students, and inclusion of students who do not want to study in compulsory education. One of the school administrators stated the following:

School administrations and teachers should have influence and authority on discipline. For example, recently I said 'I will cut his hair' because a student wanted to dye his hair. He said, "I write a petition, because the school principal is raping my hair. (P11, Male, Principal, Middle School)

Table 4.

Problems Encountered in Student Affairs at Schools

Code Problems	Sub Theme	Sample expressions
S1	Disciplinary penalties are not deterrent	P2 "Another problem is disciplinary events. The fact that disciplinary penalties are not deterrent in primary and secondary schools brings along the lack of discipline in the educational environment. "
S2	Difficulty in maintaining discipline in dressing	P14- "We have problems with students regarding dress code."
S3	Low socio-economic levels of students	P14- "The low socio-economic level of the students and the lack of studying at home is also a challenge for us."
S4	Not being able to guide students according to their interests and abilities	P17- "Unfortunately, we cannot guide children according to their abilities because our current referral system is based on centralized exams."
S5	Lack of educational infrastructure for children from the village	P3- "The pre-education information of the children coming from the village is very incomplete, this affects the quality of the education."
S6	Adaptation problems of mobile students	P9- "Mobile teaching is a waste of time and adaptation problems for students. […] It would be more appropriate if schools were opened in the center of three or four villages."
S7	Inclusion of students who do not want to study in compulsory education	P32- "The problem in secondary schools is that students who do not want to study continue to these schools because of 4 + 4 + 4 uninterrupted education."

Two school administrators stated that giving up uniforms in schools made it difficult to maintain discipline. On the other hand, the low socio-economic level of the students, the inability to direct the students according to their interests and abilities, the lack of education of the children from the village, the adaptation problems of the bussed students, and the enrollment of students who do not want to study in compulsory education were among the other stated problems.

Other problems in schools

In the study, problems that could not be classified under the themes of support-budget, program, employee, and student affairs were collected under the 'other' theme. It is seen that the problems expressed under this theme were mainly related to the macro level education policies, parents, and school environment. Participants mentioned eight different problems under this heading. Regarding parents, the indifference of parents towards school and low education level of parents were among the most emphasized problems. One of the school administrators stated the following:

Parents' indifference towards their children is at the top of the problems arising from parents. So, they are not in contact with the school. In fact, let me tell you humorously, some parents have two or three students in our school and cannot tell their classes exactly. In other words, he comes to ask for a student certificate and I say, 'what grade he is in'. He cannot answer exactly. The low

education level of parents is also a big problem. In other words, he cannot help his child or direct him. The teacher gives homework to the student, but the parents can neither reads or writes. He cannot help the student. (P34, Male, Principal, Primary School)

Table 5.

Other Problems in Schools

Code Problems	Sub Theme	Sample expressions
O1	Parents' indifference to school	P23- *"Fifty percent of our parents are parents who visit school almost once or twice a year."* P31- *"Parents' indifference is another problem. Especially after the 3rd grade of primary school, there is a break in parents. It is very difficult to warm the parents to the school, especially if they are unsuccessful when they see academic success or failure in their child."*
O2	Frequent change in education policies	P7- *"[...] Education policies in Turkey is changing very often. There is a lot of intervention. Different factors come into play. Education has turned into a jigsaw puzzle. This is very dangerous and there is no consistency between the decisions taken. [...] "* P35- *"It's been thirty-five years since I got into this business. It has been played with the system continuously in recent years. Every government that comes to power is trying to put forward its own hegemony."*
O3	Low education level of parents	P4- *"Parents should follow a little bit of the curriculum and have the capacity to help us. Since we are a village school, we find it difficult to find parents who can help us in this part. "* P11- *"The lack of education and training knowledge of our parents has a negative effect on the management of the school."*
O4	The school environment is bad	P9- *"Another problem is the environmental factor. If the neighborhood is bad, the quality of students and parents also decrease. In some circles, there may be a tendency towards bad habits "*
O5	Difficulty in transferring the problems to the upper system	P2- *"And perhaps the most important problem is that we have difficulties in conveying the problems in the school because the teacher does not have a minister."*
O6	Privatization in education	P3- *"The privatization trend that started in healthcare has a problem gradually spreading to education. The pioneers of this are the lack of allowance for schools, the lack of assistant services, the practices of substitute teachers, the incentives given to the private sector [...] all these reduce the quality of schools. Escape from public schools begins [...] This will mean subcontracting of education in the long term."*
O7	Too many bureaucratic jobs and obstacles	P12- *"Bureaucracy puts us in trouble. There is a lot of correspondence, a lot of things. Bureaucratic*

Code Problems	Sub Theme	Sample expressions
		obstacles are a nuisance. As an administration, our job is almost bureaucratic. I read a lot of correspondence daily. It comes daily, so you have to answer all of them. I think we need to reduce them a little bit so that we can do work for education."
O8	Schools are not autonomous	*P31- "It is necessary to establish an autonomous structure for schools. In other words, I should not do everything in line with the orders and instructions of the National Education Directorate."*

Frequent change in education policies was another problem frequently expressed by administrators. School administrators emphasized that education policies should be state policies beyond everyday politics. On the other hand, in the process of designing education policy in Turkey, taking the opinions of employees' education was often seen as a problem as well that was not executed based on scientific data. One of the participants stated the following:

> *First of all, I think there is an education policy problem in our country. We have a system that is constantly changing according to daily political conflicts. In this respect, stitches cannot be fixed in schools. This is the main problem in primary schools. Therefore, we must have a consistent policy-making process based on research results, not based on arbitrary practices. The views of training workers should be able to be included in the process. Education cannot be an arbitrary field, nobody should be able to say "I did it, it happened. […]. (P22, Male, Principal, Primary School)*

The poor environment of the school, the difficulty in transferring the problems to the upper system, the existence of privatization in education, the high number of bureaucratic work and obstacles, and the lack of specific schools were among the other problems expressed by school administrators.

Results of Pareto Analysis on Vital Problems of Schools

Pareto analysis was conducted to determine the vital problems of the schools. The results of the Pareto analysis are given in Figures 2 and 3. Accordingly, schools had 38 problems. As a result of the Pareto analysis, 12 of these problems were found to be vital. These 12 problems constituted 80% of the problems faced by schools (Appendix 2).
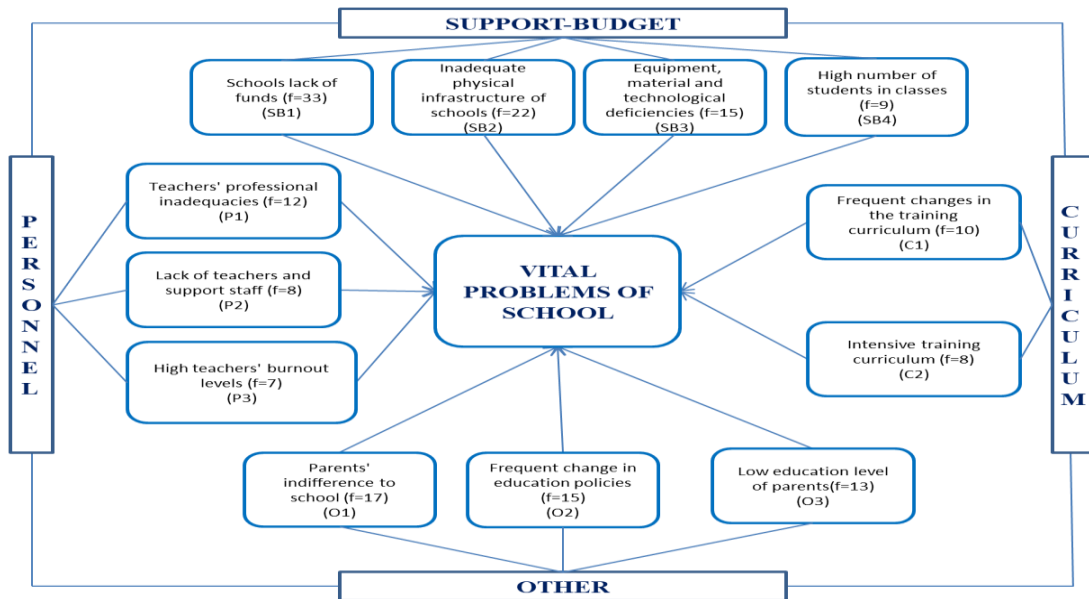
Figure 2. Pareto analysis results regarding the vital problems of schools

According to Pareto analysis, the vital problems of the schools were; lack of funds for schools, insufficient physical infrastructure of schools, parents' lack of interest in school, frequent changes in education policies, lack of equipment, materials and technology, low education level of parents, vocational insufficiency of teachers, frequent changes in education programs, crowded class sizes, lack of teachers and auxiliary staff, intense training programs, and high levels of burnout of teachers (Figure 2-3).
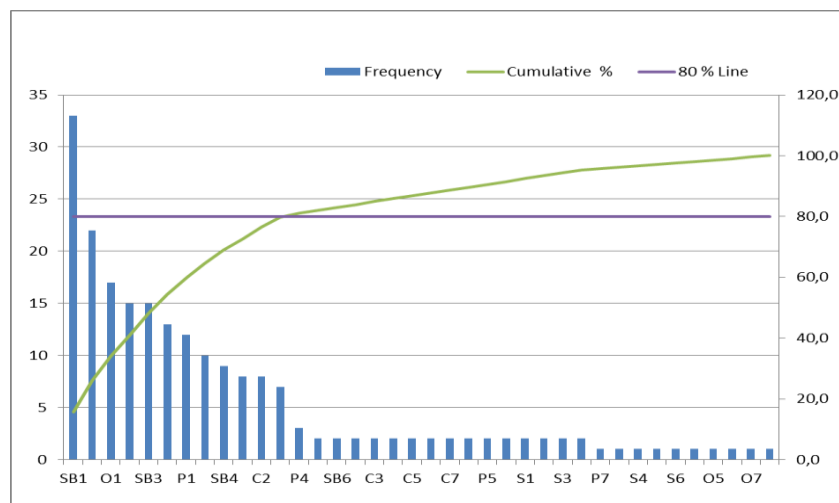
Figure 3. Pareto analysis chart on the vital problems of schools

Findings Regarding the Solution of the Problems of Schools

Schools (basic system), which constitute the most important pillar of the education system, are the places where educational activities actually take place. According to

Bursalıoğlu (1991, p. 6), the task of the school administration is to keep the school alive in accordance with its objectives. The suggestions for the solution of the problems of school administrators, who are expected to keep the school alive in accordance with its objectives, are important. For this reason, in the study, school administrators were asked about their solution suggestions for the problems they encountered in schools. Suggestions are presented under themes parallel to the problems and in alphabetical order.

In Turkey, the school administrators and teachers, the policy-making process regarding the training activities carried out or never be said that a great deal of outside or they have a say in the decision-making process. Mostly, training employees try to fulfill their duties within the framework of the legal legislation that regulates the training process such as laws, regulations, directives, and circulars and in line with the targets included in the training programs. The imbalance of authority and responsibility of school administrators, who are generally not decision makers but practitioners regarding their work, is frequently mentioned (Bursalıoğlu, 1991). For example, one of the managers stated the following during the interviews:

> […] There are so many problems. You will say that what are you doing? We cannot do much about the solution. […] We do not have the right to intervene, as most of them are system-related problems […]. (P3, Male, Principal, Primary School)

School administrators regarding the problems encountered in support and budget affairs in schools made four recommendations: allocating more budgets for infrastructure investments, transitioning to a school-based budgeting system, determining the equipment, material and technological needs of schools and meeting the needs of schools in order of priority, developing standards for the environment and facilities of schools, and monitoring these standards on a school basis. It is seen that all of these suggestions fall within the jurisdiction of the upper system, that is, the central organization. It is seen that the basic system (school) and intermediary upper systems (district and provincial organizations) can contribute to the monitoring studies in the standards established for the schools (Table 7).

Ten suggestions were presented regarding the problems experienced in the program in schools. Solutions such as reducing the weekly course hours in secondary schools, associating the programs with life, increasing the weight of social activities in the programs, and saving the education system from being exam-oriented are suggestions for the content of existing programs. However, school administrators also made suggestions involving structural changes. For example, returning to the 5 + 3 system in primary and secondary schools, making preschool education compulsory, ending the combined classroom practice, and reorganizing mobile teaching were among these suggestions. In addition, administrators thought that measures should be taken to eliminate the difference in quality between schools. None of the solution proposals made regarding the size of the program were only within the jurisdiction of the basic system or intermediary parent system. Of these, they can contribute to the intermediary upper system and the upper system, regarding the inclusion of more social activities in

school programs and measures to eliminate the difference in quality between schools. It is seen that all of the recommendations regarding the size of the program are within the jurisdiction of the upper system (Table 7).

Table 7.

Solution Suggestions and Authorized Systems for the Problems of Schools

Problem Area	Solution Recommendations	Authorized Systems		
		Basic System	Tool Upper System	Upper System
Support-Budget	More budget should be allocated for infrastructure investments.			X
	School-based budgeting system should be introduced.			X
	The equipment, material and technological needs of the schools should be determined and met in order of priority.	X	X	X
	Standards regarding the environment and facilities of schools should be developed and these standards should be followed.	X	X	X
Curriculum	Double shift schooling implementation should be stopped.			X
	The education system should be saved from being exam oriented.			X
	In primary and secondary schools, the 5 + 3 system should be returned.			X
	Social activities should be included more in school programs.	X		X
	Measures should be taken to eliminate the difference in quality between schools.	X	X	X
	Preschool education should be made compulsory.			X
	Weekly course hours in secondary schools should be reduced.			X
	Programs should be associated with life.			X
	Pilot applications should be made in system changes.			X
	Mobile teaching should be rearranged.			X
Personnel	Inservice training needs of training employees should be determined and met seriously.	X	X	X
	Activities that will increase the motivation level of education employees should be organized.	X	X	X
	The personal rights of education employees should be improved.			X
	Employees' opinions should be taken in training regulations.		X	X
	School administration should be permanent.			X
	The powers of school administrators should be increased.			X
	The need for teachers, civil servants, and assistant attendants in schools should be met.		X	X

Problem Area	Solution Recommendations	Authorized Systems		
		Basic System	Tool Upper System	Upper System
	Selection criteria of teacher candidates for Education Faculties should be revised.			X
	Teachers' internship practice should be reviewed.			X
	Policies should be developed to improve the dignity and professional development of the teaching profession.		X	X
	Substitute teacher employment should be abandoned.		X	X
Student	Primary and secondary school gardens should be separate.		X	X
	Security guards should be employed in every school		X	X
	The powers of teachers and administrators regarding disciplinary penalties should be increased.			X
	Go back to school uniforms.	X	X	X
Other	Education policies should not change frequently, they should be consistent and based on scientific studies.			X
	Activities aimed at raising awareness of parents in schools should be increased.	X		
	Schools should be autonomous.			X
	Home visits should be increased.	X		

School administrators made eleven suggestions regarding employee problems. These were; to meet the inservice training needs of education employees, to take measures to increase their motivation levels, to improve their personal rights, to take the opinions of employees in educational regulations, to make school administrators permanent, to increase the authorities of school administrators, to meet all kinds of employee needs of schools, to review the training and selection process of teachers, to suggest policies aimed at increasing the prestige of the teaching profession, to improve teachers' professional development, and to give up the employment of substitute teachers. It is possible to take measures at the basic system level regarding the suggestions of determining the in-service training needs of the training employees and increasing the motivation levels of the employees. However, it is seen that all of the solution proposals under this theme are within the jurisdiction of the intermediary upper system and upper system (Table 7).

In this research, the least problem was expressed under the theme of student services. School administrators made four suggestions under this theme. These were; primary school and secondary school gardens should be separated, security guards should be employed in each school, the authority of teachers and administrators in disciplinary penalties should be increased, and school uniforms should be returned. Apart from returning to school uniforms, two other suggestions require regulation regarding the legislation, and separating the school gardens is in the task of the intermediary upper system and upper system (Table 7).

Four suggestions were presented for the problems under the other theme. These were; education policies should not be changed frequently, they should be consistent and based on scientific studies, increase the activities aimed at raising the awareness of parents in schools, autonomy of schools, and increase home visits. It is seen that suggestions other than activities for parents are under the authority of the parent system (Table 7).

Discussion, Conclusions, and Recommendations

The ability of each level of education to fulfill the educational goals expected of it, besides its individual returns, has perhaps much more vital social benefits and consequences. In this sense, the functions expected of primary and secondary schools in Turkey, how it can perform, is one of the basic questions. This level, which can be defined as primary education, can directly or indirectly determine the effectiveness of other levels of education. Failure to realize the functions expected from this level may affect the effectiveness of other levels due to the cumulative nature of education. According to Uluğ (1998), the effectiveness of a system is proportional to its power to meet the expected functions. The more the system's power to respond to the needs decreases, the more difficult it is to survive and maintain its social dynamism. In this study, the problems experienced in primary and secondary schools were tried to be determined from the primary source, based on the opinions of school administrators, and in a sense, variables that reduced the effectiveness of the system were determined.

During the interviews conducted on the problems of primary and secondary schools, 38 problems under five themes were identified. As a result of the Pareto analysis, 12 of these problems were found to be of vital importance. According to this, the vital problems of primary and secondary schools within the scope of the research were 'lack of funds for schools',' lack of physical infrastructure of schools', 'parents' indifference to school', 'frequent changes in education policies',' lack of equipment, materials and technology', 'low education level of parents', 'professional inadequacies of teachers', 'frequent changes in educational programs', 'crowded class sizes', 'lack of teachers and support staff', 'intense training programs', and 'teachers' high levels of burnout '. Four of the vital problems were under the theme of support and budget, three were under the theme of employee, two were under the program, and three were under other problems.

The problem of 'lack of allowances for schools' frequently emphasized by administrators reflects a reality regarding primary and secondary schools. There is no budget allocated from the center of the primary and secondary schools in Turkey. The expenses of these schools such as heating, lighting, water, and telephone are covered by the special provincial administration budgets. There are no allowances that can be used for other expenses that may occur during the education process or for the operating expenses of schools. On the other hand, the exception to this was brought to İmam Hatip secondary schools in 2012, and the Ministry started to allocate funds to

the middle of the relevant schools (Aslan, 2015). This finding is consistent with the findings of other studies conducted directly or indirectly on schools. For example, Yolcu and the Council (2009) found that primary schools collected money from parents under 60 different names due to the lack of budgets. In a study conducted by ERG (2009), it was found that the lack of centralized budgets of primary and secondary schools deepens the inequalities in education and increases the difference in quality between schools. There is a similar finding in Aslan's (2015) study. In a study of primary and secondary schools, Aslan found that the lack of school budgets deepens educational inequalities. In addition, Deveci and Aykaç (2019) analyzed the questions in basic education with the meta-synthesis method over 61 studies, and 32.3% of 387 problems were found to have infrastructure and financing problems. In this research, support services (infrastructure) and budget problems constitute an important part of all problems. In this context, it is recommended that the Ministry of National Education immediately adopt school-based budgeting and develop objective criteria that take into account the environment and facilities of schools in allocation of funds.

Problems such as "insufficient physical infrastructure of schools", "having equipment, material and technological inadequacies", and "crowded class sizes" identified among vital problems in the research are directly related to the investment budget of education. MoNE budget data support these vital problems identified in the research. Turkey examined the distribution when compared to the year-allocated funds for investment in education, investment in the consolidated budget of MNE investment rate in 2000 of 28.4% and 8.7% in 2019. Similarly, the share allocated to investments in the MoNE budget was 19.9% in 2000 and 4.9% in 2019. In the same period, the number of students studying in formal education (primary, secondary and higher education) institutions, excluding open education, was 13,616,708 in 2000 and 16,529,169 in 2019 (MEB, 2019, p.54). These data are consistent with the opinions of school administrators. The data show that the MoNE has largely withdrawn from educational investments, and the effects of this are seen in schools. There are many studies on the budget, infrastructure, and equipment deficiencies experienced by schools (Akbaba & Turhan, 2016; Aktaş, 2018; Başar, 2000; Çınkır, 2010; Deveci & Aykaç, 2019; Hoşgörür & Arslan, 2014; Karakütük & Özbal, 2019; Kayıkçı, 2014; Korkmaz, 2005; Köse & Şaşmaz, 2014; Sarıbaş & Babadağ, 2015).

In the research of Heyneman and Loxley (1983), who have a significant place among effective school research, it has been found that in low-income countries, the environment and facilities provided by the school are more important than individual differences in the academic success of the student. Heyneman and Loxley explained this result by the limited educational opportunities of the less developed countries and the high inequality between schools. As a matter of fact, some administrators drew attention to the difference in quality between schools, although it was not seen among the vital problems in this study. Problems identified in the research such as "coexistence of primary and secondary schools", "combined classroom practice", and "double shift schooling" were also other problems related to the infrastructure that support the limitation of educational opportunities. For this reason, the ages of the schools should

be determined, physical and equipment deficiencies should be eliminated according to a priority order, and differences between schools should be minimized.

In the research, 'parents' indifference towards school' and 'parents' low education level were other vital problems. Low education level of parents may be one of the reasons for indifference towards school. As a matter of fact, the higher the education level of the parents, the higher the academic success of the children (Akyol, Sungur & Tekkaya, 2010; Alomar, 2006; Aslan, 2017; Hortaçsu, 1994; Öksüzler & Sürekçi, 2010; Özer & Anıl, 2011; Yılmaz, 2000) There are studies that determine that family is important in success (Aslan, 2017; Keçeli-Kaysılı, 2008; Küçüker, 2018b; Yıldız, 1999). On the other hand, these two vital problems are also related to the socio-economic levels of the parents. According to the State Planning Organization and the World Bank (2010) study has completed 84.0% of the poor in Turkey or basic education or are illiterate. 35.0% of this group and 19.0% of those who do not complete basic education live below the poverty line. In particular, poor parents with low socioeconomic status have vital concerns outside of the educational agenda which may be one of the reasons for lack of interest in school (Küçüker, 2018b). On the other hand, there are studies revealing that the policies pursued by schools for students with low socio-economic level are insufficient. In Aslan's (2019) research aiming to evaluate the aid policies followed in schools for poor students with low socio-economic level, it has been determined that there are no common systematic policies pursued for poor students, the policies depend on the budgets of parent-teacher associations and on extra-budgetary private income sources created by the school in various ways, and are insufficient. Aslanargun (2007) found the reasons for parents' indifference to school in his research conducted in the form of scanning. He mentioned that many variables such as education level of families, income levels, number of children, negative attitudes towards school and teachers, and residence status in villages or cities have effects. Regarding these two problems, although there are some precautions to be taken in schools, macro level economic and social policies should be followed to increase the life and awareness of parents.

On the other hand, although it is not identified among the vital problems in this study, "the low socio-economic level of the students" and "the parents' unwillingness to donate to the school" expressed by the administrators reflect the situation of parents and schools. These problems both confirm the above determination and may be one of the reasons of indifference towards the school. Primary and secondary schools that do not have a budget may request donations from parents within the scope of family cooperation to the school which may cause parents to distance themselves from school more. As a matter of fact, we believe that these requested donations damage the school-family cooperation. There are studies on this issue when it causes various non-pedagogical problems between parents and school (Kavak, Ekinci ve Gökçe, 1997; Yolcu, 2007; Zoraloğlu, Şahin ve Fırat, 2004).

Among the vital problems of schools are the frequent changes of 'education policies' and 'educational programs'. Frequent changes in education programs can of course be considered as a part of education policies. However, in this study, in order to make the

problem regarding training programs visible, the statements of the administrators on this issue were taken as a separate sub-theme. Education policies, due to the nature of education, have to have long perspectives because a student who starts primary school today will graduate from higher education after 16 years if he never fails. But in Turkey, the life of many regulations on the education system, the average is two to three years, is not long lasting enough to cover a student's graduation process. When the education policies of the last ten to fifteen years are examined, it is possible to come across many regulations that justify these problems expressed by school administrators. This problem can be seen even when exams that regulate the transition from primary education to secondary education are examined. For example, the entrance exam for high schools was removed in 2005 and the Secondary Education Exam was replaced in 2007, and the Placement Exam (SBS), which required to take the exam in the 6th, 7th and 8th grades, was replaced in 2007. The life of this exam was three years, the high school transition exam was rearranged in 2010, the number of exams was reduced from three to one, and by 2013, SBS left its place to the Basic Education Transition Exam (TEOG) (Aslan, 2017). This exam was abolished in 2017, and a dual structure was replaced. In the majority of high schools, "address-based placement" and in a small number of "qualified" high schools, a new pass exam was introduced. It is possible to increase these examples.

These regulations were implemented without taking the opinions of the training employees and often without pilot applications, and the practices were abandoned for short periods in terms of training policies. As a matter of fact, school administrators mentioned that both education employees and parents had difficulties in following these policy changes. Such changes in the education system bring along uncertainties. Schlechty (2014, p.158) states that the biggest challenge facing education administrators today is managing the chaos caused by uncertainty. In this study, school administrators stated that frequent changes in the legislation, both in terms of education programs and other policies regulating the education system, negatively affected education. There are studies supporting this finding. In a study conducted by Karaman Kepenekçi with school administrators in 2004, it was found that school administrators complained about the frequent changes in the education legislation.

Another vital problem expressed by school administrators was that "the training programs are intense". It is seen that especially the administrators who expressed this problem were working in secondary schools. In 2012, compulsory education was increased to 12 years, the duration of education levels was rearranged, and structural changes were made in the system. With this regulation, the weekly course hours of middle schools were increased to 35. However, some school administrators mentioned that secondary school students had difficulty in lifting this burden because they are still children of play age. In addition, it was stated that the elective courses in schools have turned into compulsory electives due to the lack of teachers and infrastructure, and there is no real diversity in the programs regarding the interest of the child. As a matter of fact, studies on elective courses support this finding (Tanrıverdi & Kardaş, 2013; Yayla & Tat, 2013). This finding is consistent with the research findings of Deveci and

Aykaç (2019). In the related research, it was determined that 16.0% of the questions in basic education are program problems.

Although not among the vital problems, some administrators also mentioned other problems related to the program such as "the inability to equip students with life skills", "the young age to start school", and "the education system being exam-oriented". Although the problems of not being able to equip students with life skills and the education system being exam-oriented have been on the agenda of the education system for a long time, the low age of starting school came to the agenda with the regulation made in 2012. With the relevant regulation, it has been made compulsory for 60-month-old children to start primary school. At the time of the legal regulation, scientific reports were prepared in well-established universities regarding the problems that this regulation would create (Ankara University [AU], 2012; Boğaziçi University [BU], 2012; Middle East Technical University [METU], 2012), (Başar, 2013; Küçüker, 2016). As a matter of fact, some school administrators stated in the study that the age of starting primary school was small.

Problems related to training employees were also identified in the research. Among these, "teachers 'professional inadequacies", "lack of teachers and support staff", "teachers' high burnout levels" were among the vital problems. Some school administrators mentioned that teachers were not trained in a qualified pre-service period and that they were not in an effort to improve themselves during their service. This finding is consistent with the research findings conducted by Okçabol et al. (2003). 1324 senior high school students, 2,088 teachers, 951 teachers participated in the study, and it has been carried out in Turkey working with 310 instructors in faculties of education. In the related study, 54% of teacher candidates, 40% of teachers and 34% of instructors think that the courses related to the field conducted in education faculties are insufficient to teach those courses. 63% of the teacher candidates and teachers and 50% of the lecturers think that the education provided in the education faculties is inadequate. In the research, in the evaluations about teachers, 26% of senior high school students stated that they disagreed with the following statements 'know their subjects well', 33% 'know the innovations in education', 37% 'encourage us to be creative', and 39% 'against our criticisms'.

In addition to the professional inadequacies of teachers, their quantitative inadequacies were among the vital problems. Some school principals mentioned the need for teachers, especially in Guidance and English branches. As a matter of fact, school administrators think that substitute teacher employment was also a problem. These two problems are related to one another. Because in cases where there is no permanent or contractual employment, governors in provinces and district governors in districts can appoint teachers. There are many studies on the problems created by substitute teachers in the education system (Bayram, 2009; Kiraz ve Kurul, 2018; Öğülmüş, Yıldırım ve Aslan, 2013; Polat, 2013; Şahin, 2008; Torun 2010). The lack of support staff, which plays an important role in keeping the school ready for education, has been widely observed in schools.

On the other hand, high burnout levels of teachers is another vital problem. Problems that occur due to teacher burnout do not only concern that person, but also reflect on students, school, parents, and immediate environment. This situation can have negative effects on the quality and quantity of education services and reduce the effectiveness of education services (Arslan & Aslan, 2014). There are many studies supporting the findings on teachers' burnout levels (Akçamete, Kaner & Sucuoğlu, 2001; Aksoy, 2007; Arslan & Aslan, 2014; Bağcı & Karagül, 2013; Çağlayan, 2012; Erçen, 2007; Girgin, 1995; Gündüz, 2006; Kayabaşı, 2008; Yüksel, 2009). For example, Cemaloğlu and Şahin (2007) found in a study they conducted in Ankara that the depersonalization and emotional exhaustion levels of senior teachers and the depersonalization levels of primary school teachers were high. On the other hand, the "decrease in the social prestige of the teaching profession" and "an increase in the groupings among the teachers", which were identified in this study other than vital problems, may cause teachers to decrease motivation levels and increase their burnout levels. More research on this climate in schools may contribute to the provision of educational services.

Although not among the vital problems, many problems have been identified in this research. Although some of these have been discussed above in the context of their relationship to vital problems, the aforementioned problems are; inequalities between schools, disciplinary punishments not deterring, difficulty in maintaining discipline in dress, poor environment of the school, lack of educational infrastructure for children from the village, lack of staff security of school administrators, adaptation problems of students who do not want to study and their enrollment in compulsory education. It can be concluded that problems such as privatization in education, excessive bureaucratic work, and obstacles preventing the effective functioning of the education system should be investigated in depth.

One of the most striking findings of this research is that almost all of the solution proposals put forward by the managers are within the jurisdiction of the upper system. This finding points to two points. The first points out to the central structure of the Turkish Education System, and the second, again in relation to the first point, to the imbalance of authority-responsibility in the education system. According to Uluğ, the main function of schools, which are the basic systems of TES, is to produce educational services. The school system, manpower, technology, equipment, knowledge, etc. required for the production of education is dependent on upper systems. This dependence is one of the main reasons why schools are often inadequate to increase educational quality. Therefore, the poor functioning of the school system ultimately causes the entire education system to fall short. According to Bursalıoğlu (1991), there are imbalances between the authorities and responsibilities of school administrators. While the authorities are concentrated in the upper system (central organization), the responsibility lies largely in the school. As a matter of fact, school administrators have also mentioned other problems such as 'limited authority', 'schools not being autonomous', and 'difficulty in transferring problems to the higher system'.

Identifying the problems faced by schools is important for developing effective education policies. Because without solving the problems faced by schools, the goals of education cannot be fully achieved. School administrators are people who are directly dealing with the problems faced by the education system and have to develop solutions. Therefore, their views on the education system should be the basic data for developing the system, solving education problems, and providing a quality education. School administrators' and teachers' views are rarely used in educational policy-making process in Turkey. It is recommended that those who direct education policies hear the voices coming from the basic system, re-establish the balance of authority and responsibility, and involve education employees in decision-making processes regarding education through democratic means. On the other hand, it is essential for "school administration" to become professional and to develop the leadership and problem-solving competencies of administrators. In this context, in the Ministry's appointment of school administrators, it is indispensable to bring the postgraduate education requirement, appoint graduates of educational management programs of universities, and in the long term, YÖK's opening of undergraduate programs of this discipline not only solve the problems of schools but also improve schools.

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Appendix 1. *Personal Information on School Administrators*

Item Number	Sex	Age	Title	Teaching Seniority (Year)	Administrator Seniority (Year)	Ed. Level	School administration Period (Y/ M)	School Village	Socio-economic level of the school[†]
P1	Male	38	School principal	10	5	Primary	1/--	City	Middle
P2	Male	48	Assistant principal	6	20	Middle	1/4	Town	Low
P3	Male	43	School principal	3	17	Primary	5/--	City	Middle
P4	Male	36	Assistant principal	13	6	Pr./ Mid.	6/--	Village	Low
P5	Male	50	School principal	24	5	Primary/ Middle	2/--	City	Middle
P6	Male	47	School principal	18	4	Middle	2/--	City	Middle
P7	Male	43	School principal	10	2	Middle	2/--	District	Low
P8	Male	58	Assistant principal	17	12	Primary	6/--	City	High
P9	Male	46	School principal	3	19	Primary	2/--	Town	Low
P10	Male	50	School principal	11	9	Middle	1/7	City	Middle
P11	Male	52	School principal	15	8	Middle	4/--	City	Middle
P12	Male	37	Assistant principal	13	2	Primary	1/5	Town	Middle
P13	Male	47	School principal	8	21	Middle	4/--	City	High
P14	Male	58	School principal	4	30	Middle	7/--	City	Middle
P15	Male	40	School principal	17	10	Primary	3/--	Village	Low
P16	Male	38	Assistant principal	16	1	Middle	-/10	City	Middle
P17	Male	36	School principal	5	6	Pr./ Mid.	1/--	City	High
P18	Male	50	School principal	18	10	Primary	1/--	Village	Low
P19	Kadın	43	Assistant principal	16	4	Primary	4/--	Town	Low
P20	Male	42	School principal	16	4	Middle	4/--	City	Middle
P21	Male	50	School principal	18	9	Primary	6/--	Town	High
P22	Male	35	School principal	7	8	Primary	3/--	City	High
P23	Male	45	School principal	11	14	Primary	5/--	City	Middle
P24	Male	58	School principal	4	28	Middle	7/--	Town	Middle
P25	Male	39	School principal	3	11	Middle	6/--	City	Low
P26	Male	38	Assistant principal	6	6	Primary	5/--	Village	Low
P27	Male	37	School principal	10	5	Primary	2/--	Village	Low
P28	Male	41	School principal	12	7	Middle	1/--	Town	Middle
P29	Male	39	School principal	3	11	Middle	1/--	City	High
P30	Male	50	School principal	20	3	Middle	1/5	Town	Middle
P31	Male	37	Assistant principal	4	11	Middle	1/5	City	High
P32	Male	51	School principal	3	29	Middle	2/--	District	Middle
P33	Male	42	School principal	15	6	Middle	1/--	Village	Middle
P34	Male	42	School principal	4	14	Primary	1/5	Village	Low
P35	Male	55	Assistant principal	3	32	Primary	24/--	City	Low

[†] The socio-economic levels of the schools were created based on the views of the administrator.

Appendix 2. *Pareto Analysis Results on Vital Problems of Schools*

Code	Expression	Frequency (f)	Cumulativ Total	Cumulative %
SB1	Schools lack of funds	33	33	15,6
SB2	Inadequate physical infrastructure of schools	22	55	25,9
O1	Parents' indifference to school	17	72	34,0
O2	Frequent change in education policies	15	87	41,0
SB3	Equipment, material and technological deficiencies	15	102	48,1
O3	Low education level of parents	13	115	54,2
P1	Teachers' professional inadequacies	12	127	59,9
C1	Frequent changes in the training curriculum	10	137	64,6
SB4	High number of students in classes	9	146	68,9
P2	Lack of teachers and support staff	8	154	72,6
C2	Intensive training curriculum	8	162	76,4
P3	High teachers' burnout levels	7	169	79,7
P4	Substitute teacher employment	3	172	81,1
SB5	Having primary and secondary schools together	2	174	82,1
SB6	Inequalities between schools	2	176	83,0
SB7	Parents not wanting to donate to the school	2	178	84,0
C3	Early school starting age	2	180	84,9
C4	Failure to equip students with life skills	2	182	85,8
C5	Multigrade class implementation	2	184	86,8
C6	Double shift schooling	2	186	87,7
C7	Frequent changes in the exam system	2	188	88,7
C8	Exam-oriented education system	2	190	89,6
P5	Decreasing social prestige of the teaching profession	2	192	90,6
P6	The limited authority of school administrators	2	194	91,5
S1	Disciplinary penalties are not deterrent	2	196	92,5
S2	Difficulty in maintaining discipline in dressing	2	198	93,4
S3	Low socio-economic levels of students	2	200	94,3
O4	The school environment is bad	2	202	95,3
P7	Increase in groupings among teachers	1	203	95,8
P8	School administrators lack of staff security	1	204	96,2
S4	Not being able to guide students according to their interests and abilities	1	205	96,7
S5	Children from the village have educational deficiencies	1	206	97,2
S6	Adaptation problems of mobile students	1	207	97,6
S7	Inclusion of students who do not want to study in compulsory education	1	208	98,1
O5	Difficulty in transferring the problems to the upper system	1	209	98,6
O6	Privatization in education	1	210	99,1
O7	Too many bureaucratic jobs and obstacles	1	211	99,5
O8	Schools are not autonomous	1	212	100,0

Student Views on the Use of Online Student Response Systems: The Kahoot! Case

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Abstract: Student response systems effectively collect and collate students' responses, allowing teachers to provide immediate feedback to learners, thereby preventing a decline in students' attention and motivation. In this study, a student response system instrument called Kahoot! was used. The study was conducted as a 4-week case study in an undergraduate course and a quiz consisting of 10 questions was created each week. Student views and recommendations were collected with an open-ended interview form. The obtained data were analyzed by content analysis, one of the qualitative analysis methods. The study findings were grouped under different codes, and it was determined that the majority of the students were of the view that the Kahoot! application improved course attendance, provided repetition of the learned topics, increased the motivation and attention. Furthermore, they stated as pre-service teachers that the Kahoot! Application should be used at the end of theoretical lectures and courses in the classroom and the number of questions should be increased.

Keywords: Student response systems, Kahoot, game-based learning, student engagement

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Introduction

The learning and teaching methods, techniques, and materials are continually improved based on technological advances because the innovations and changes that the 21st century introduced to individuals' lives also affect their learning and teaching styles (Korkut & Akkoyunlu, 2008). The educational and instructional courses are conducted using various methods, application environments, and materials (Seferoglu, 2006). The course environments are sometimes constructed with a certain curriculum and in other cases, using independent methods. However, an effective course topic or material may not necessarily be transformed into an adequate learning environment alone. (Meyers & Jones, 1993; Wieman, 2007). It was reported that such learning environments are not student-centered and do not provide effective or active learning (Armbruster, Patel, Johnson & Weiss, 2009; Cubukcu, 2012). Previous studies demonstrated that the methods and techniques that encourage students to attend the course rendered the course more active and supported it (Deslauriers, Schelew & Wieman, 2011; Hake, 1998; Wieman, 2007). Many instructors expect more classroom interaction and participation. Today, many technological environments and tools are used to increase interaction and participation in the classroom (Wang & Tahir, 2020). The construction of an interactive classroom environment that will be student-centered, encourage student participation, and provide an active learning environment is beneficial for students (Bicen & Kocakoyun, 2018; Blood & Neel, 2008; Cameron & Bizo, 2019; Galil, Mayberry, Chan, Hargis & Halilovic, 2015; Hall, Collier, Thomas & Hilgers, 2005; Keser, 2005; Sun, 2014). It is known that there are some problems in creating such an environment (Ertmer & Ottenbreit-Leftwich, 2013). One of these difficulties is students' inability to adapt to the classroom environment and avoid academic emotions such as embarrassment and frustration that are behind the said inability (Hwang, Wong, Lam & Lam, 2015; Kaiser & Wisniewski, 2012). Some digital materials are utilized to overcome these problems (Clark & Mayer, 2016; Çağıltay et al., 2007). One of these digital materials that aim to instruct student-centered courses (Gauci, Dantas, Williams & Kemm, 2009), create an active learning environment (Martyn, 2007), provide motivation (Cain, Black & Rohr, 2009; Hall et al., 2005; Wang & Tahir, 2020), promote critical thinking skills (Trees & Jackson, 2007), problem solving skills (Beatty, Gerace, Leonard & Dufresne, 2006) and participation (Blood & Neel, 2008; Carnaghan & Webb, 2007) is the student response systems (SRS).

SRS is an effective feedback tool that stimulates participation in a course or a topic in an environment where quizzes are constructed with audio, video, and text elements (Cameron & Bizo, 2019; Carnaghan, Edmonds, Lechner & Olds, 2011; Egelandsdal & Krumsvik, 2017; Heaslip, Donovan & Cullen, 2014; Wang & Lieberoth, 2016). The SRS is a digital material that could be encountered in different fields, especially in learning environments. This material, which enhances interaction and participation in the classroom, emerged under different names in various fields and industries, such as electronic voting systems, audience response systems, classroom response systems, and SRS (Stav, Nielsen, Hansen-Nygard & Thorseth, 2010; Wang & Tahir, 2020). This environment, known as the SRS in education and training environments, is a digital

technology where students can respond instantly to questions posed on the system in a classroom or in a different educational environment (Chaiyo & Nokham, 2017; Gok, 2011; Penuel, Boscardin, Masyn & Crawford, 2007; Stav et al., 2010). This technology is known to be incorporated into a system through an electronic device (a clicker) that the users utilize to respond (Galal et al., 2015). However, with the emergence of the internet, web 2.0 tools and mobile technologies, a new generation of Web-based SRSs has emerged (Toth, Logo & Logo, 2019). This online SRSs possess essentially the same structure although they contain different interfaces and elements. It was observed that the development and popularity of SRSs led to their use in different industries, mainly in education and instruction (Chui, Martin & Pike, 2013). The main focus of these systems is education, instruction, and students and they enable the assessment of the course by the students with the aim to increase participation and attention (Galal et al., 2015). A list of the most popular online web-based SRSs is provided in Figure 1.
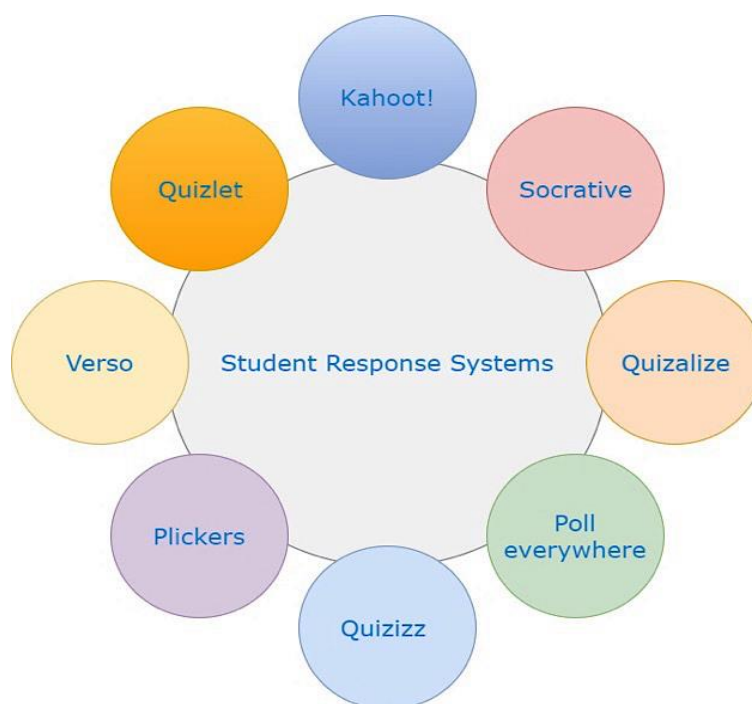
Figure 1. Popular online web-based SRSs

Today, several web-based SRSs are offered to students to promote participation in the class, make the instruction more enjoyable and attain learning goals (Icard, 2014; Plump & LaRosa, 2017, Wang & Tahir, 2020). Kahoot!, one of the most popular SRS applications, is prominent with its ease of use and its ability to make the course more fun and interesting, promote participation,promote participation, and provide feedback facilities (Bicen & Karakoyun, 2018). Previous studies conducted on Kahoot! demonstrated that it is a digital game-based learning tool (Bicen & Karakoyun, 2018; Cameron & Bizo, 2019; Dellos, 2015; Plump & LaRosa, 2017; Nguyen & Yukawa, 2019). Game-based learning facilitates learning for both the student and the teacher,

improves the course's efficiency, student motivation, interest, and participation through game-based tools (Bicen & Kocakoyun, 2018).

Game-based multiple choice questions, discussion questions, questionnaires, and puzzle games could be designed with Kahoot! (see Figure 2).

Figure 2. Kahoot! test alternatives

In education and instruction process, students might hesitate or be afraid of expressing their opinion in general platforms or due to the possibility of a negative response from the teacher when a question is asked (Lusk & Weinberg, 1994; Hwang et al., 2015). This leads to an intrinsic silence in the classroom and often to the decline of the motivation and interest in the class (Nguyen & Yukawa, 2019). Establishing environments where learners can express themselves comfortably would resolve this pro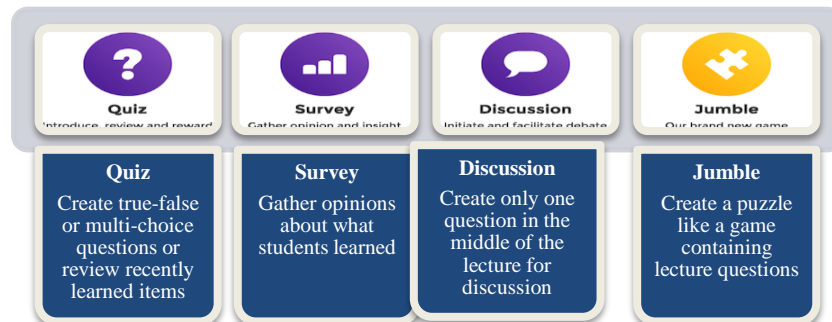blem to some extent (Leithwood & Jantzi, 2000). The students' lack of participation in the class due to certain academic emotions would also affect their academic performances (Kibble, 2007). Toth, Logo and Logo (2019) used Kahoot! Application to improve students' learning, and it was observed that the students who used kahoot as a result of the study had better exam results. To encourage students to participate in classroom environment, to improve their motivation and interaction between students, applications such as Kahoot! could be utilized (Bicen & Kocakoyun, 2018; Chaiyo & Nokham, 2017; Hwang et al., 2015; Plump & LaRosa, 2017; Toth, Logo & Logo, 2019; Wang & Lieberoth, 2016; Yapici & Karakoyun, 2017). One of the most important steps in connecting learners to the courses is drawing attention (Driscoll, 2002). The fact that Kahoot! and similar SRS applications make the course entertaining, draw attention and develop critical thinking skills demonstrates the reasons behind their popularity (Chui et al., 2013; Dellos, 2015).

This study aimed to reveal the views and experiences about the use of Kahoot! application during a course given to prospective teachers in higher education. This is the first Kahoot! study that was used by information technology teacher candidates in the Database and Management Systems course. The Database and Management course requires some theoretical knowledge before practice. In this process, the motivation and attendance of students towards the lesson may decrease. Due to the students who had difficulty in database lessons and whose attendance was low, it was

decided to use an additional quiz application during the course and Kahoot! Web application was chosen.

Thus, the following research questions (RQ) were established in the present study:

RQ1. What are pre-service CEIT teachers' views towards in-classroom use of Kahoot! Application?

RQ 2. What are the learning environments and usage techniques that pre-service CEIT teachers would use the Kahoot! application in?

RQ 3. What are the recommendations of pre-service CEIT teachers for more active and productive use of Kahoot! Application in courses?

Method

The research model, data collection instruments, study group, data analysis, and the implementation process are discussed in this section.

Research Design

The present paper is based on a case study, a qualitative research method. Case study is a research method where one or more events, environments, social groups, the programs or interrelated systems are examined in detail in their natural framework (Flyvbjerg, 2006). Case studies are proposed to be used to assess learning-teaching processes, especially in educational research (Shulman, 1986). Case studies aim to investigate in-depth a phenomenon or event and are based on "how" and "what" questions (Yildirim & Simsek, 2013). In the present study, the case was determined as the use of the Kahoot application in database management systems course, and an attempt was made to examine in-depth and in detail what kind of experience the process would generate and what would be its effects.

Study Group

The study group included 45 students who attended the database management systems course at İnönü University, Faculty of Education, Computer and Instructional Technologies Department. The research sample consisted of 12 students randomly selected among 45 students. One of the researchers was the lecturer at the Database Management Systems course. Other researchers were academics working at Inonu and Gazi Universities.

Data Collection Instrument

The researchers investigated the relevant literature and used an open-ended interview form to obtain study data. During this process, the computer and Instructional Technologies academicians' opinions were obtained. The interview questions'

proficiency was determined, and several items were edited. After the literature review and expert opinions, the researchers prepared an open-ended interview form consisting of five questions. The five open-ended interview questions were confirmed by expert opinions that they were at a level to reveal the students' detailed opinions about the Kahoot application used in the study. All the interviews were audiotaped with the consent of all participants. The researcher who was not a lecturer of the course conducted the interviews. Interviews lasted about 40 minutes. Participants were informed about the purpose of the study and detailed explanations confirmed that personal information would be kept confidential.

Implementation Tool: Kahoot!

Kahoot! is a student response system used to improve students' motivation and participation during the class and to review the class topics (Chaiyo & Nokham, 2017). Kahoot! was developed as a new generation web/mobile student response system. Users can access the system with a desktop or mobile system with an internet connection using a current web browser without a need for registration. In practice, registration is required only for educators who want to design questions for an education program or a different assessment test. Kahoot! application and other similar SRSs are well-designed and practical applications. Thus, educators can easily create online assessment tests (quizzes) within a few steps and present the students' related test (see Figure 3)

Figure 3. The Kahoot! application process

Students who want to participate in the educator's test enter the pin number of the particular test at Kahoot.it and define a nickname and start to respond to the questions in the relevant test on the web simultaneously with other participants (see Figure 4 and 5). After each question is answered, the system displays the most rapid three students and related statistical data on the screen. After each question, the students who have the most total correct answers are ordered, and after the last test is completed, the top students are displayed on the screen. Participants can also view detailed statistical results based on the educator preferences.

Figure 4. Kahoot! Participant screen

Figure 5. Kahoot! Response screen (play.kahoot.it)

Questions answered by the students are saved in the system at the end of the test. On the other hand, the ranking is displayed on the screen after each question, and finally at the end of the quiz the general ranking is displayed. After each question is answered, a feedback on the question is provided for the students (see Figure 6 and 7).
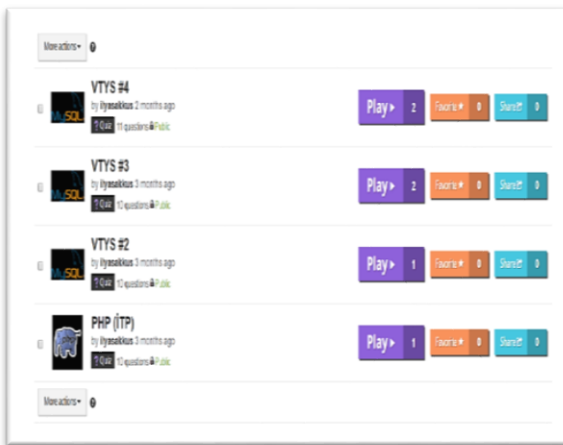

Figure 6. Tests designed for 4 weeks in the study
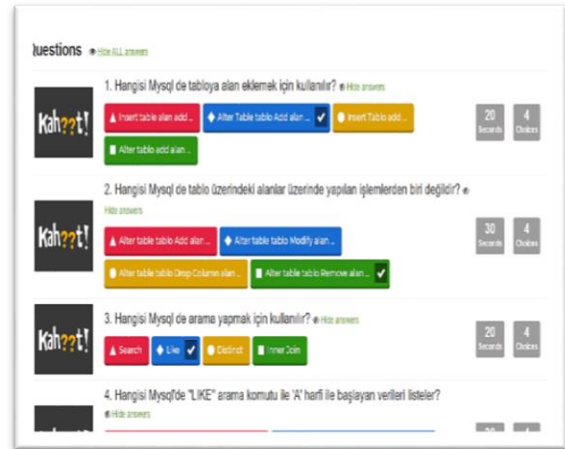
Figure 7. Kahoot application sample

The detailed report for the participating students and the statistical data on the responses are shown as presented above (see Figure 7).

The questions (quiz) determined by the educator were listed separately for each week, and a different pin number was required for access to the test every week. A sample question in the Kahoot! application used in the present study was displayed on the screen to the students as shown below. Students answered the question displayed on
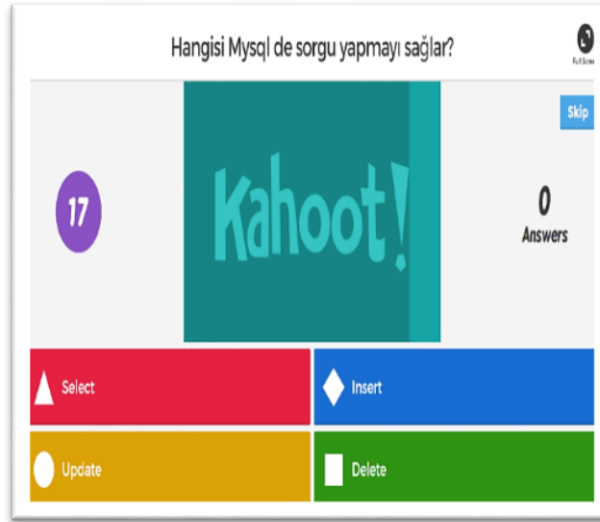
the screen by selecting the color of their selection on their device (see Figure 8).

Figure 8. Simple question outcomes of this implementation

Data Analysis

Data analysis was conducted with content analysis. Content analysis entails the conversion and categorization of complex data to obtain meaningful data via analysis (Yildirim & Simsek, 2013). The general aim of content analysis is to achieve concepts, relational structures, and the concealed facts within the data (Creswell, 2007). First of all, the interview records were reviewed and transcribed. After the study, data were transcribed, reviewed, and coded by different researchers by Nvivo Caqdas Software. The researchers repeatedly checked the interview records to avoid data loss or destruction for each question. The researcher who was the instructor of the course and the researcher who conducted the interviews coded the data. Furthermore, the two researchers examined the coding and attempted to achieve consistency by eliminating the differences. Following the coding process, two authors discussed about the codes, and common features among the codes were determined and categorized. After coding interview data, findings were analyzed under three research problems.

Validity and Reliability

Interview questions were examined by three different field experts and were reorganized accordingly. A pilot scheme was conducted before the data were collected,

and the interview questions were reviewed and edited for clarity and comprehensibility. The study data were collected from volunteering participants. In order to improve the validity and reliability of the study, all interviews were recorded with an audio recorder. Coding was conducted by the two researchers separately. The differences were resolved through discussions, and a consensus was reached about the differences to establish consistency. To improve the reliability of the study, the participant statements were directly cited in the manuscript. The coherence between the categories and codes was established.

Research Process

This study was conducted in four weeks, and the student feedback was obtained at the end of the class with Kahoot! every week (see Figure 9).

1. week	2. week	3. week	4. week
Kahoot!	Kahoot!	Kahoot!	Kahoot!
10 Question	10 Question	10 Question	11 Question
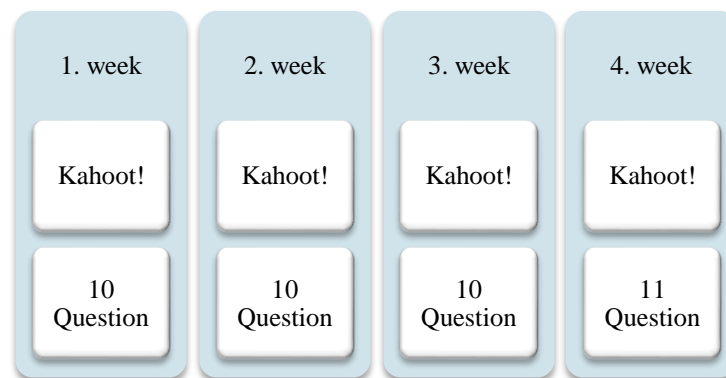
Figure 9. Research process

The study was conducted in the Database Management Systems course, and 45 students participated in the study. In the first class, Kahoot! application was briefly introduced and 10 pre-prepared multiple-choice questions about the week's topic were shown to the students. At the end of the four weeks, the students' views were obtained with the open-ended interview form that the two authors designed and validated and evaluated by two faculty member field experts. Five questions were shown to the students. Obtained interview data were supported by researcher observations and diaries.

Findings

In this section, the themes, code tables, and findings obtained with content analysis conducted on the study data are interpreted.

RQ1. The Views of Pre-service CEIT Teachers on the Use of Kahoot! Application in the Course

In the study, the pre-service students were asked to communicate their views on the use of Kahoot! application in the course. The opinions obtained were analyzed and the resulting themes were interpreted in two separate tables of *positive and negative views*. Content analysis conducted on the obtained views revealed *n = 12* codes under this question (see Table 1).

Table 1.

The Codes that Included the Positive Views Theme of Pre-Service Teachers on Kahoot! Application

Codes	f	%
Entertaining	9	14.29%
Review	9	14.29%
Drawing attention	7	11.11%
Motivating	7	11.11%
Reinforcement	7	11.11%
Promoting participation	6	9.52%
Readiness	5	7.94%
Competition	3	4.76%
Gamification	3	4.76%
Feedback	3	4.76%
Concretization	2	3.17%
In-class interaction	2	3.17%

The analysis of pre-service teachers' positive responses in the study on the Kahoot! application and the codes that could be considered as the advantages of the application demonstrated that they mostly found the application entertaining (*n= 9*). Regarding this, one pariticipant said *"It makes the lesson more enjoyable and it is an important tool to keep the lesson not boring. I would like it to be used in every lesson."* And the another most prominent code within the said main theme was the review of the learned topics (*n = 9*). In the course, the other significant codes were the reinforcement of the course (*n= 7*), encouragement of promoting participation (*n= 6*) and motivation (*n= 7*). In the analysis, a participant about the reinforcement code that was among the positive contributions to the lesson said "*We reinforced what we learned in the lesson by solving the questions in these quizzes and it made what we learned permanent.*"

On the other hand, about motivation code, a participant stated the following: "*I believe that it contributes to our learning, and it allows us to remember and review the knowledge, increasing our motivation for the course in a competitive environment.*" On the students' readiness before class ($n= 5$) and the increase in in-class interaction ($n= 2$) because of the Kahoot! application, a participant stated the following: "*I now attend classes prepared after the implementation. Because it increases competitiveness among the classmates and everyone tries to answer more questions correctly, which makes the course more active and it becomes fun.*"

Furthermore, in the study where it was deducted that use of the Kahoot! application in the course drawing attention ($n= 7$) and provided gamification ($n= 3$), a student stated "*The course became more fun with Kahoot! application. I never wanted to attend the course before, but now the course is more attractive for me*", demonstrating that the course also had a motivating aspect ($n= 1$). Another participant supported the attention-grabbing and entertaining element of the application: "*It was fun for me. Also, it became more fun with my classmates. The course grabbed my attention better.*" Regarding the feedback ($n= 3$), a participant said, "*It was sometimes difficult to get feedback about any concept or topic we did not understand in the lesson, but the feedback was also provided in this Kahoot! practice.*"

In the second table, $n= 3$ codes emerged with the negative views theme on the use of Kahoot! application in the course (see Table 2).

Table 2.

The Codes that Included the Theme of the Negative View of Pre-service Teachers on Kahoot! Application

Codes	f	%
Stealing the course time	4	44.44
Loudly stating the answers	3	33.33
Failing students are offended	2	22.22

Table 2 shows that pre-service teachers considered that Kahoot! application stole the time assigned for the course ($n= 4$). On this issue, a participant stated "*The application was beneficial, but I think it takes too much time, and some friends loudly gave the right answer, so they affected the answers of others.*" One participant said, "*When the questions appear in the application, some friends say the answers out loud, so they affect the results.*" Another complaint was that the correct answers of the questions were voiced loudly by other students in the classroom ($n= 3$) and the students who did not know the correct answer were offended ($n= 2$).

Rq2. Learning Environments and Usage Techniques that CEIT Pre-service Teachers Could Utilize the Kahoot! Application

The pre-service teachers were asked about their views on the learning environments where they could use the Kahoot! application and the techniques that they can utilize while implementing the Kahoot! application. Content analysis conducted on the obtained views revealed $n= 3$ main codes and $n= 6$ sub-codes under the main codes (see Table 3).

Table 3.

The Codes on the Views of Pre-service Teachers on Learning Environments Theme Where They Could Use the Kahoot! Application and Usage Techniques

Main Codes	Sub-codes	f	%
Timing	At the end of the class	6	27.27
	At the beginning of the class	3	13.64
Learning environment	Theoretical courses	4	18.18
	Applied courses	2	9.09
Method	Quiz method	4	18.18
	Gamification method	3	13.64

When the pre-service teachers were asked in which learning environments, under which timings and with which techniques they would use the Kahoot! application, it was determined that most wanted to use the application at the end of the class ($n= 6$), while others preferred to use it at the beginning of the course ($n= 3$). A participant on this subject said *"If we use this application at the end of the lesson, we will repeat and reinforce all the topics we taught that day."* On the learning environment, pre-service teachers claimed that Kahoot! application was more suitable in theoretical courses ($n= 4$) when compared to applied courses ($n= 2$). Participants stated that they could use the application with the courses' quiz and gamification techniques: *"I would like the application to be used more in the theoretical courses that are learned by rote. I would ask them easy and difficult questions at the end of the class after the instruction to see whether they have comprehended the topic. Thus, I would provide them with a fun environment, while allowing them to review the topic."* Another participant stated the following: *"I would prefer the use of the Kahoot! application in applied courses. Before the class, I would prepare questions to review the previous week's topics. Thus, the students would learn while having fun and they would be able to review the topic."*

RQ3. Recommendations of CEIT Pre-service Teachers for more Active and Productive Use of Kahoot! Application in Courses

Pre-service teachers were asked to offer recommendations for more active and productive use of the Kahoot! application in courses. As a result of content analysis of the participant recommendations, $n= 4$ codes emerged (see Table 4).

Table 4.

The Codes that Reflect the Recommendations Theme of Pre-Service Teachers for More Active and Productive Use of the Kahoot! Application in Courses

Codes	f	%
More time should be allotted	9	52.94
Questions that include audiovisual elements should be included	3	17.65
Rewards should be awarded	2	11.76%
Number of questions should be increased	2	11.76%

On more active and productive use of Kahoot! application, pre-service teachers recommended to allot more time for each question since the time allowed was not sufficient (n= 9). One participant on this topic said, "*The questions are very instructive and the exercise is fun, but a little more time should be given for each question.*" Furthermore, they stated that the questions should contain audiovisual elements (n= 3) and the users should be rewarded at the end of the application (n= 2). Another participant commented as follows: "*The students should be rewarded based on the results, the number of questions should be comprehensive based on the course the students attend.*" One participant stated the following on the topic: "*I would like to use the Kahoot! application in every course. Of course, the number of questions should be higher, and it would be better to use more visual materials when asking questions.*" In addition to this comments a participant said, "*I learn better subjects using Kahoot and I think it should be used especially in verbal-based lessons.*" Increasing the number of questions in the application (n= 2) was among the other prominent codes.

Discussion

There are certain consequences of the use of SRSs in education. Perhaps, one of the most important consequences of SRS use, which is used by both the instructor and the student and becomes popular every day, is the promotion of active learning (Bawa, 2019; Bicen & Karakoyun, 2018; Licorish, Owen, Daniel & George, 2018; Martyn, 2007; O'Donoghue & O'Steen, 2007). One of these SRS systems that allows students to bond with the course via entertaining activities and make sense of the learning is Kahoot! application (Cameron & Bizo, 2019; Chaiyo & Nokham, 2017; Dellos, 2015; Plump & LaRosa, 2017; Uçar & Kumtepe, 2017; Wang & Lieberoth, 2016). In a study conducted on the topic, Wang and Lieberoth (2016) stated that SRSs are used in courses with gamification methods and achieved student participation and motivation using audiovisual material, animations, etc. Also, in the present study, it was observed that students who stated their views on Kahoot! application usually exhibited positive views. Participants who stated that Kahoot! application was entertaining and drawing attention expressed their satisfaction with the application. Bawa (2019) stated that Kahoot! application increases learning performance of university students and

contributes to active learning. Previous studies reported that most web-based SRSs are game-based learning tools and Kahoot! Application was one of these (Chaiyo & Nokham, 2017; Dellos, 2015). Some participants indicated that Kahoot! application was a feedback tool. Previous studies also reported that Kahoot! and similar SRS applications are effective feedback tools (Egelandsdal & Krumsvik, 2017; Hwang et al., 2015; Licorish et al., 2018; Plump & LaRosa, 2017). Wichadee and Pattanapichet (2018) stated that providing instant feedback greatly affects students' motivation and Kahoot allows all students to participate and get feedback at once. In this study, one of the participants' featured views about Kahoot application is the positive contribution to concentration. Chaiyo and Nokham (2017) stated in their experimental study on student response systems' effect on students' perceptions that the Kahoot! application has positive contributions to concentration. Cameron and Bizo (2018) used game based Kahoot! application to facilitate learning engagement in animal science students. As a result of the study, they stated that Kahoot! did not increase the engagement or achievement of the students, but students considered the application as a fun social activity at the end of the lesson.

In educational environments, several printed and digital materials are used in the classroom and it is known that these materials contribute to learning and teaching activities at different levels (Wei & Hindman, 2011). Present study findings demonstrated that the most significant contributions of the Kahoot! application to the course were the promotion of participation in the course, reinforcement, instill competition, provoke challenge, and review of learning. The fact that it provided motivation and concretization demonstrated the application's positive features. Ucar and Kumtepe (2017), who conducted a study on the use of Kahoot! application in the classroom, stated that Kahoot! application engages the students to the course and motivates them, and their observations reflected that the students liked the application extensively. The fact that SRS applications such as Kahoot! are game-based applications that could draw the attention to the course motivates the students and promotes participation (Ganapathy & Kaur, 2018; Siegle, 2015; Tan Ai Lin, Wang, 2015).

Participants, when asked about their negative views on Kahoot! application, stated that it takes too much time when used in classroom environment and some students voiced their answers loudly when answering the questions on the application. Licorish et al., (2018) found some problems on their Kahoot study. First of all, they stated that teachers could reduce Kahoot sessions' length and devote more time to the post-Kahoot discussion of the answers. And also teachers might support students when they used the Kahoot application. So they could utilize the effectiveness of Kahoot. Besides, some students mentioned technical problems including unreliable internet connections, hardship of reading questions and answering on a projected screen, not being able to change answer after submission, stressful time-pressure for giving answers, not enough time to answer, fear of losing, and difficulty in catching up if an incorrect answer had been given (Nguyen & Yukawa, 2019; Wang & Tahir, 2020).

Concerning the views on usage of Kahoot! application, it was stated that it should be applied at the end of the class, in theoretical courses, and with multiple choice questions . Dellos (2015), who used Kahoot! to reinforce learning and provide feedback at the end of the class, stated that students comprehended the missing points and concepts better and the application improved classroom participation. In a thesis by Ciaramella (2017), Kahoot! application was used for vocabulary learning and memorization of elementary school students with learning disabilities, and it was stated that the vocabulary learning, and memorability improved at the end of the study (Ciaramella, 2017). In an empirical study, Edison and Hurtado (2017) used the Kahoot! application for English vocabulary learning and stated that the motivation and achievement of the students in the course increased as a result of the study (Medina & Hurtado, 2017).

The students' recommendations for more active and productive use of the Kahoot! application included the increase of the time allotted for the application and the utilization of audiovisual material in the present study. Furthermore, the students also proposed the use of rewards, increasing the number of questions and utilization of the application in theoretical courses.

Limitations and Suggestions for Further Research

Although a positive result has been achieved as a result of this study, it is wondered what kind of effects might be possible with different research methods and SRS applications in different fields. In this study, it is a limitation that the group used as the sample was not selected by the random method and selected by the purposeful sampling method. However, it is possible to include studies in which samples are generated by random assignment method using experimental designs. Since the research a case study, 45 people in a selected section have been identified as a sample in a four-week study period. A semi-structured interview form prepared as a measurement tool was used and investigator observations supported data.

Another limitation was the use of the Kahoot! application in student response systems. The use of the Kahoot application is high in availability and usability, while many SRS applications are web-based and running on different devices. The fact that the study was conducted on only one class and on a sample made it difficult to estimate the validity of the data. However, the consequences of such case studies are mainly due to the fact that they are welding quality.

In the present study that investigated online SRS systems and the Kahoot! application, which is one of these SRS applications, it is proposed to utilize the application in other departments in the field of education. The comprehensive effectiveness of SRS systems could be determined in future studies that would compare other web-based SRS applications with Kahoot! and conduct content analyses. Furthermore, it is considered that higher education level samples should be selected in addition to the K-12 level in future implementations.

Conclusion

In summary, this study, which utilized a case study design of qualitative research methods, implemented Kahoot! application in a lesson environment where a class of 45 people was present and its reflections on students were revealed. The data were collected from 12 students selected from this group. The results of the four week period in this study using the Kahoot! application as one of the game-based online student response systems were positive from the participants' perspective. The Kahoot! application has been one of the most prominent views that encourage student engagement in the classroom, promote motivation, reinforcement, and repetition. Previous studies have supported the result of this study, in which student response systems increase class participation and motivation in the classrooms they are used. In particular, web-based and mobile-supported Kahoot! and similar SRS applications in learning environments are expected to contribute positively in the same way with the spread of studies in different dimensions.

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Stakeholder Views on Early Literacy and Reading and Writing Acquisition in the Preschool Period

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Abstract. This research aims to reveal stakeholder views on early literacy and reading and writing acquisition in the preschool period. It is a case study conducted with the descriptive survey model. The research participants consisted of academics, primary school teachers, early childhood education teachers, primary school teaching students, and prospective early childhood education students. Five semi-structured interview forms were used as the data collection tool. The data were analyzed through content analysis method. The results indicate that stakeholders have a flexible approach to teaching reading and writing in the preschool period and support early literacy education. The roles that early childhood education teachers, preschool education institutions, and parents should play, are presented. It is recommended to increase the cooperation of stakeholders having an essential role in literacy skills development and to reshape the pre-service and in-service training related to early literacy.

Keywords: Teaching, reading and writing, early literacy, early childhood education, stakeholder views.

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Introduction

In today's world, increasing information, communication technologies, and easy access to these technologies enable the phenomenon of literacy to continuously evolve and lead to the emergence of different types of literacy. Indeed, in the 21st century, although it is considered essential to have new literacies that include the skills, strategies, and trends necessary to use technologies that affect all aspects of life (Lapp, Moss & Rowsell, 2012), new types of literacy also need to be included and supported in educational processes.

Defined as the ability to identify, understand, interpret, create, communicate, and compute using printed and written materials associated with different contexts (UNESCO, 2004, p. 13), literacy includes language skills such as reading, writing, speaking, and listening, as well as cognitive skills such as examination and thinking (Zygouris-Coe & Center, 2001). It is noted that literacy skills are closely related to language skills (Moats, 2010) and that people who acquire literacy skills can identify their problems concerning reading and writing, make the necessary arrangements by correcting their errors, if any, and control the process (Collins, 1994, cited by Aşıcı, 2009).

While Alphabet literacy had been at the forefront for ages, with the Industrial Revolution, separate types of literacy came up in many areas. The concepts of reading and writing and literacy have been used interchangeably for many years, and knowledge literacy has changed this perspective in that it also uses high-level skills in a way that serves other types of literacy. Emphasizing that the difference in meaning between these concepts is becoming more and more apparent, Kurudayıoğlu and Tüzel (2010, p. 285-286) explained the difference between reading and writing and literacy concepts as "the reading-writing process is a static behavior that serves to figure out a particular letter system, whereas literacy is a developable skill that aims to make sense of everything that has a message." Similarly, Neuman and Dickinson (2018, p.51) emphasize the difference between these concepts by stating, "Beyond acquiring a number of basic skills to decode written symbols and produce written symbols, it is necessary to develop an interpretive competence with many forms of communication and representation." In this context, it seems that literacy, which refers to a developmental process, is a high-level skill involving language skills.

It is known that literacy skills, which are among the language skills and are directly associated with reading and writing skills (Scott, 1996), begin to develop in early childhood (Justice, 2006; Teale and Sulzby, 1992). The studies, based on the fact that literacy skills begin long before starting formal education, consider the literacy process in three dimensions: Emergent literacy, early literacy, and conventional literacy. Emergent literacy refers to the process in which several literacy-related behaviors are exhibited from birth to the end of the early childhood period. Early literacy is defined as the period which is before starting conventional reading and writing with the

development of emergent literacy skills while conventional literacy refers to the period of reading and writing (Justice, 2006).

The early literacy approach, which covers early childhood before the literacy period, includes all of the knowledge, skills, attitudes, and behaviors necessary for literacy (Whitehurst and Lonigan, 1998). Young (2003) notes that children acquire early literacy skills in the early childhood period and defines these skills as the overall reading and writing experiences that will become the basis for reading and writing learning when they start school. According to the early literacy approach, the literacy phenomenon progresses as the child's development continues, and the child already has much knowledge about literacy and language when he or she starts school (Stricland, 1993). The common idea in the various definitions regarding early literacy is that several skills acquired before the reading and writing learning process contribute to reading and writing afterwards.

It is stated in the literature that early literacy skills, which include vocabulary knowledge, phonemic awareness, writing awareness, letter knowledge, and verbal language skills, are essential in the literacy learning process (Dickinson & McCabe, 2001; Neuman & Dickinson, 2018; Jalongo, 2013; Whitehurst & Lonigan, 1998). It is stated that these mentioned skill areas are associated with each other and that these skills mutually affect each other's development (Kendeou et al., 2009). For example, of the early literacy skills, vocabulary knowledge plays a critical role in the formation (Hirsch, 2003) and development of language components (Biemiller, 2003; Bromley, 2007; Peitz & Vena, 1996; Robinson, 2005). The broadness, depth, and weight of vocabulary knowledge are essential for developing understanding and expression skills that people will need during their lifetime. Vocabulary knowledge, which multiplies in early childhood (Juel, 2006; Neuman, 2011; Snow & Oh, 2011), enables vocabulary development, galvanizing a number of cognitive processes. Similarly, phonemic awareness (Anthony & Francis, 2005; Chung & McBride- Chang, 2011), which can also be defined as the ability to analyze by realizing that verbal language can be divided into units regardless of meaning, such as words, syllables, and sounds, and the ability to use these units effectively and correctly, shows up as a skill that supports vocabulary knowledge by improving it in making sense of the formal dimension of the vocabulary knowledge. In this context, it will also be possible for children to enhance their awareness of learning new words and developing vocabulary knowledge by being conscious of the sounds and syllables that enable the formation of words.

The realization that written language has a different form than verbal language also begins to occur at an early age such as in reading skill awareness (Justice et al., 2005; Whitehead, 2007; Wortham, 2009). Writing awareness means enhancing children's knowledge of the writing form and function (Isiklan & Akoglu, 2016). Considering that one of the strong predictors in prognosticating reading skills is writing awareness

(Farver, Nakamoto & Lonigan, 2007), children are expected to advance to formal reading learning in the period after written words begin to be associated with spoken words (Ezell & Justice, 2005; Wang, 2015; Vacca et al., 2012). In this respect, awareness of written forms of vocabulary knowledge supports the development of reading skills and in the same sense, language skills seem to develop collectively. Vocabulary knowledge, which begins to develop through listening, provides the development of skills to understand what is listened to, to speak and express oneself verbally. Phonemic awareness and letter knowledge, on the other hand, provide the improvement of the formal dimension of vocabulary, and with the development of writing awareness, the preparation of the development of reading and writing skills is realized. Therefore, it is observed that these skills support each other's development and allow them to achieve literacy.

Nowadays, it is recognized that studies supporting children's early literacy skills in the early childhood period play a critical role in their long-term literacy success (Kent et al., 2014; Kim, Al Otaiba & Wanzek, 2015; Nation, Cocksey, Taylor & Bishop, 2010; Neuman & Dickinson, 2018; Whitehead, 2007). However, it is noted that children whose reading and writing skills are not supported face some difficulties when they begin reading and writing learning in formal education (Hanson & Farrell, 1995; Justice & Ezell, 2001). In other words, it is necessary to support early literacy (Justice, 2006) skills, which are a critical developmental stage, before moving on to reading and writing in formal education. In developing these skills, the process must be supported by experienced persons (family, teachers, peers, etc.), and students should be offered real-life opportunities (Zygouris-Coe & Center, 2001, p. 4). In this regard, it is crucial to systematically improve early literacy skills (Langeloo et al. 2019) and developing children's early literacy skills should be one of the principal goals of early childhood education (Snow, Burns & Griffin, 1998, p. 188). Besides, considering that not all children can start early childhood education having the same language skills level, the preschool teacher needs to determine each child's improvement levels and build the educational processes upon this foundation. Therefore, "preschool teachers should have the current professional knowledge and research-based responsibility to support literacy development in children. Teaching needs to be adapted in a way that takes into account children's differences, and especially for children with less experience in language skills, preschool teachers are required to take advantage of every opportunity (IRA & NAEYC, 1998). In other words, "...Teachers should create a positive classroom environment for improving children's literacy skills, and use various teaching methods and techniques for those who come to these schools not having enough readiness and sensitivity in terms of their literacy skills." (Uyanik & Kandir, 2010, p. 122).

Of course, teachers should provide their students with opportunities to gain experience by organizing learning environments in the early childhood period covering early childhood and "use different strategies in early literacy education" (Fisher, 1991). Also, the fact that preschool teachers perform studies aiming at developing early literacy

skills in the classroom regularly, planned, and purposefully has a vital role in supporting children's reading and writing skills (Yalçıntaş Sezgin and Ulus, 2017). However, studies have shown that preschool teachers do not have sufficient knowledge of the concept of early literacy and the development of early literacy skills, and confuse early literacy with early reading and writing learning (Altun & Tantekin Erden, 2016; Ergul et al., 2014; Ozdemir & Bayraktar, 2015). In this context, just as the concepts of reading and writing, and literacy, are used interchangeably, it is observed that the concepts of early reading and writing learning, and early literacy are also not entirely distinguished.

Although there are different approaches related to reading and writing learning (standard approach, holistic language approach, balance approach, etc.), it is clear that reading and writing learning can be achieved by supporting early literacy skills in the early childhood period. Studies on the positive effects of supporting reading and writing teaching in early childhood by placing early literacy skills in the center are included in the literature (Evans & Hulak, 2020; Guo, et al., 2020; Hanson & Farrel, 1995; Mayer et al., 2020). Indeed, in addition to the experience gained with books and written materials in the early period (Morrow, 2009; Whitehead, 2007; Whitehurst & Lonigan; 1998), having enriched stimulus in the immediate surroundings (Clay, 2016), and the ability to access information and communication technologies (Clay, 2015; Mangen & Velay, 2010, Mayer et al., 2020), it seems that children whose literacy and communication skills are supported by early childhood education institutions and their parents (Guo et al., 2020; Morrow, 2009; Puglisi, et al., 2017; Puranik et al., 2018; Strickland, 2004) can easily learn to read and write in the early childhood period. Through these experiences, the results arising from supporting children with skills-oriented processes independent of age in reading and writing learning make it necessary to restructure the process of teaching reading and writing. In this context, it is thought that the examination of the assessments and suggestions of the leading stakeholders of literacy education about teaching reading and writing in the early childhood period and early literacy education processes will contribute to the literature and be helpful to decision-makers and practitioners in terms of re-designing the instructional processes and guiding the educational programs to be developed. In this regard, this research aims to reveal different stakeholder views on early literacy education in teaching reading and writing in the early childhood period as well as preparing for reading and writing. For this purpose, research questions are presented as follows:

- What are the perspectives of research participants on reading and writing teaching in the early childhood period?

- What do the research participants think about the impact of early literacy education received in the early childhood period on the process of teaching reading and writing?

Method

The qualitative research (Creswell, 2012) (an exploratory and interpretive process conducted by the researcher to examine the formation processes of events and facts, to explain the essential qualities of individual and social events and facts that people experience) enables finding out how studying people see the world, how they define a situation, or what a condition means to them (Neuman, 2010). In this study, the qualitative research approach was adopted in determining the assessments of various stakeholders for the development of teaching reading and writing in the early childhood period, and early literacy skills. This research is a case study conducted with the descriptive survey model. A case study (Yin, 2009) is a research method used to answer questions about how and why, when the researcher does not have control over variables, can also be used as a method of examining complicated situations through rich description and contextual analysis (Davey, 1991). Futhermore, decision and decision-making processes, programs, specific implementation processes, or organizational change issues can also be included in case studies (Yildirim & Simsek, 2018). In this context, determining the views of preschool and primary school teachers, candidates and faculty members who play an essential role in developing the literacy skills of the individuals, in the structuring and implementation of the processes of teaching reading and writing, was considered as a case study in this research. It is recommended in case studies that more than one data collection tool be used (Yin, 1984). In this way, we used five different interview forms prepared for each stakeholder group, carried out in-depth data collection, and obtained data diversification by reaching out to different stakeholder groups in the research.

Participants

In determining the research participants, the maximum variation sampling method was used. In maximum variation sampling, the aim is not to provide diversity to generalize, but to try to find out whether there are any common or shared facts between diverse situations and to examine the different dimensions of the problem considering this diversity (Marczyk, DeMatteo & Festinger, 2005). In this regard, participants with different expertise (teacher, faculty member, teacher candidate) were also included in the research sampling to determine common and different situations by taking their opinions about early literacy education, and teaching reading and writing in the early childhood period. The participant characteristics are presented in Table 1.

Table 1.

Participant Characteristics

Participants	Expertise and Research Interests	Number of Participants
Teacher	Primary school teacher	23
	Preschool teacher	13
Academician	Faculty member expert in teaching reading and writing	2
	Faculty member of early childhood education	2
Undergraduates	Primary school teaching program	18
	Early childhood education program	7
	Total	65

The participants of the research are composed of preschool teachers, primary school teachers, faculty members who teach undergraduate and graduate courses in the field of reading and writing, faculty members who teach primary school preparation and language development courses in the field of early childhood education, students of the undergraduate program of primary school teaching, and students of the early childhood teaching program who took the course of "Language Development and First Reading and Writing Teaching" at a Foundation University in Ankara, Turkey. The parents were not included in the study group as the issue of early literacy and teaching reading and writing were study subjects that required pedagogical subject matter knowledge. Participant IDs have not been disclosed throughout the process, and participants were encoded with numbers during the analysis process.

Data Collection Tools

The research data collection tools were five semi-structured interview forms composed of open-ended questions, enabling the research participants to reflect their expertise. In this context, a total of five interview forms consisting of different questions for each group of participants were prepared. The forms were presented to five subject matter experts, including two experts in the area of preschool education, two primary school education experts, one assessment and evaluation expert. An evaluation of the formal and semantic appropriateness of the forms was also conducted. After collecting expert views, interview forms were tested by conducting face-to-face pilot interviews with one person representing each group of participants but was not one of the research participants. Following the pilot interviews, the interview questions were rearranged to obtain the final version of the forms.

Data Collection and Analysis Process

The data collection process was carried out via face-to-face interviews, e-mail, and teleconferencing. A written opinion was obtained from participants who wanted to provide a written statement. Face-to-face and teleconference interviews were recorded. In the process of analyzing the data, audio recording transcripts were examined first. The written data was transferred to the computer environment. Participant views were

then analyzed through content analysis. The NVivo 12 program was used to determine and model inter-theme relationships since the themes are multidimensional and comprehensive. This was followed by the stages of encoding data, finding themes, arranging codes and themes, and defining and interpreting the findings.

Validity, Reliability and Credibility

Considering the proposed strategies for ensuring validity and reliability in qualitative research (Yildirim and Simsek, 2018), in-depth data collection, providing data diversification by reaching out to different stakeholder groups, detailed description and consistency review methods were used. The audio recording time of the interviews conducted with the 65 participants was 336 minutes, and the written transcripts of the opinions were 168 pages, indicating that the data was gathered comprehensively. Using five different interview forms consisting of open-ended questions that reflect each stakeholder group's expertise was instrumental in the in-depth data collection. The relationships between the themes and their sub-themes were modeled, and detailed descriptions were provided.

To ensure research reliability, pilot interviews were conducted with an independent person from each area of expertise. Considering a temporary reliability value, the data was analyzed by a researcher and a subject matter expert independent of the study. In line with the themes obtained at the end of the analysis, the reliability of the measurement tools was ensured. To ensure the reliability of the analysis of the collected data, two researchers who were not involved in the study, one experienced in primary school education and the other in early childhood education were asked to examine the coherence of the themes with the research questions.

In ensuring credibility, the questions proposed by Lincoln and Guba (1985) in their case studies to check whether credibility is achieved were taken into consideration. Accordingly, the researchers strived to increase research credibility by working on data sources for a long time, controlling raw data sources with interviewers, controlling the results obtained by another subject matter expert independent of the research, and presenting the results with direct statements of the stakeholders.

Researcher Role and Ethical Principles

In this study, the researcher had the opportunity to observe the process by which some of the participants acquire the theoretical knowledge necessary to develop their literacy and literacy skills by conducting the "Language Development and Reading and Writing Education" course with the participants studying in the early childhood education and primary school teaching program for one semester. Also, the fact that the researcher has many years of experience in primary school teaching and early childhood education teaching has helped him/her reflect his/her expertise in the practical dimension of the reading and writing teaching process into the process of carrying out the research. In creating the study's conceptual framework, data collection, data

analysis processes and obtaining the opinions of the experts in the field of early childhood and primary school education helped to reflect the perspectives of the different levels of learning on literacy holistically. It is believed that the ability to evaluate research data in a common body and comprehensively stems from the diversity of participants in this study and the researcher's professional relationship with all stakeholder groups. In this way, the researcher could work thoroughly with the data because the data collected was multidimensional and comprehensive.

The ethical approval for this study was obtained according to Article no.1605 of the TED University Human Research Ethics Committee. Following formal approval, the consent forms were presented to those who volunteered to participate in the study. The participants were informed that the study did not include anything which could lead to any discomfort (physical, psychological, etc.), that they were free to leave the research whenever necessary for any reason, and that in such a case, the use of the information provided by the researcher would only be used with the consent of the participant. Also, the researcher made sure that participant information would not be shared with anyone during and after the study. The aim of the research and the research process were explained to the participants, and the interviews were recorded with the approval of the participants. After the transcripts of the interviews were shared with the participants, their authorization was obtained, their names were deleted, and the record was stored in an encrypted file on the computer before the data analysis process began. These measures ensured the research was carried out according to ethical principles.

Findings

In this section, the results obtained in the study are presented in figures and tables in line with the research questions. The data obtained in the context of the research questions posed to the participants were collected under the following headings; views on reading and writing teaching in the early childhood period, the effects of early literacy education in the early childhood period, the role of preschool teachers in the early literacy education process in the context of preparation for reading and writing, the role of the parents in teaching reading and writing in early childhood period, and the role of early childhood education institutions in implementing early literacy education in the context of preparation for reading and writing. These were further divided into main themes and sub-themes. The distribution of the main themes and sub-themes that arise in line with the research participants' views on reading and writing teaching in the early childhood period by stakeholder views are given in Table 2.

Table 2.

Views on Teaching Reading and Writing in Early Childhood Period

Main themes	Sub-themes	Stakeholders				
		A	PST	PT	PSTS	ECES
Ensuring the development of skills	Developing thinking skills					
	Holding the pen properly			x		
	Self-expression				x	
	Raising writing awareness	x	x			
Preparing for primary school, and reading and writing	Making line drawing practices				x	
	Supporting auditory and visual development		x	x	x	x
	Contributing to muscle development	x		x	x	
	Vocabulary development			x	x	
	Providing reading and writing readiness		x			
	Developing a positive attitude towards reading and writing		x			x
	Contributing to self-confidence			x		
	Providing sound awareness			x		
Reading and writing teaching activities	Giving sounds within text	x	x	x	x	x
	Ability to provide education by trained teachers			x		
	Reading and writing skills becoming a necessity at an early age			x	x	
	Teaching of vowels and numbers	x	x		x	
	Teaching reading and writing by separating them from each other		x			
Reasons given for not being taught reading and writing.	The idea that teachers would have different practices		x			
	Preschool teacher's erroneous teaching				x	x
	Being early (not appropriate for the age)	x	x		x	x
	Students feeling pressure on themselves		x		x	x
	Causing students to take a dislike from the process			x		
	Causing students to get bored in the process	x			x	x
	Causing confusion	x			x	
	Harming peer relationships	x			x	x
	Causing prejudice against reading and writing				x	

A: Academicians; PST: Primary School Teachers; PT: Preschool Teachers; PSTS: Primary School Teaching Students; ECES: Early Childhood Education Students.

In Table 2, the participants' views on reading and writing teaching in the early childhood period were gathered under the themes focusing on skill development, preparing works for primary school, and reading and writing, the realization of reading and writing teaching, and the non-realization of reading and writing teaching. Research findings indicate that stakeholders from different fields refer to the development of early literacy skills in the early childhood period. In this context, the participants, who expressed the need to perform sound awareness and writing awareness studies, also made statements supporting the development of early literacy skills in the early childhood period. This finding can be interpreted as: stakeholders believe that developing early literacy skills is vital in teaching reading and writing. Some of the participant's views regarding the finding include:

> The child's experiences appealing to different developmental areas, which he or she acquired from the moment of his or her birth, perhaps even from the womb, form the basis of his or her literacy skills. If we approach reading and writing teaching in this way from a process-based point of view and take into account the differences in children, we can say that reading and writing teaching can be exposed even from infancy and that the reading and writing processes in children should also be supported in the early childhood period (Academician 3).

> His or her relationship with books can be useful in the process, for example, his/her holding that book. Maybe his/her trying to make something sound. Or something he/she saw while walking down the road - brands or something like that – his/her saying these. So he/she recognizes some

things. He knows the letters; he/she can figure out when he/she sees them. And when we observe his/her daily life, maybe something can be taught through games. (Primary School Teaching Student 5)

"Line drawing practices, sound practices, sentence directions in books, and punctuation awareness... These should be studied in the early childhood period" (Preschool Teacher 1).

The research findings show that stakeholders other than early childhood education students have a flexible perspective on carrying out reading and writing teaching in the early childhood period. On the other hand, early childhood education students disapprove of reading and writing teaching activities in the early childhood period. The fact that early childhood education students do not support reading and writing teaching, even though they take reading and writing teaching courses at the university they study, may be because they do not feel they are good enough in this field. Besides, this can be caused by the fact that they receive education in major area courses following the educational content within the curriculum and their knowledge of the information contained in the curriculum. Indeed, an early childhood education student expressed his views on this issue as follows:

"Because we have not received an education like a primary school teacher, as they take different lessons. If I am going to teach after taking the lessons, I can improve myself even more, then I can feel more competent" (Early Childhood Education Student 2).

Among the stakeholders, academicians and primary school teachers who support reading and writing instruction in the early childhood period are in the vast majority. It is particularly noteworthy that the primary school teachers remarked that preschool teachers should only teach reading, setting aside vowels, numbers, and writing from reading. This can be interpreted as the fact that the primary school teachers overlook the need to conduct reading and writing simultaneously in the process of reading and writing teaching. It can be stated that these expectations can increase the problems that students experience in the process of teaching reading and writing and inhibit the development of language skills as a whole. The following are the highlights from the primary school teacher's views on the mentioned research finding:

"Numbers and vowels can be taught in the early childhood period" (Primary School Teacher 17).

"I think he can teach reading, but not writing. Allow the child to learn reading, and then he learns writing in the first grade" (Primary School Teacher 3).

Another remarkable finding is the view that preschool teachers can perform reading and writing education depending on whether they receive instruction related to reading and writing teaching. Below are some stakeholders' prominent statements that advocate the mentioned view from preschool teachers and primary school teaching students.

"This education can be given by people who got an education in reading and writing, many of our students are already being prepared for this, they are learning how to write their names, and even write the names of their friends by seeing" (Preschool Teacher 8).

> I mean, if it can be appropriately given, I don't think it's right for someone who doesn't know very well and is just a preschool teacher to teach, saying, this is your name, and it is written like this. But if he is going to get an education, I think it might be useful if such a step is taken, at least for teaching the letters (Primary School Teaching Student 11).

Some stakeholders stated that teaching reading and writing in the early childhood period is now a necessity. Among stakeholder groups, academicians and primary school teaching students are seen to advocate this view. Some of the participant's opinions regarding this finding are as follows:

> A child should be supported in his or her life, depending on their interests and needs in the early childhood period. Today, a child often comes across many examples of information technologies in the outside world, which he or she cannot respond to behaviorally. I think that early age is not only related to school, but has now become a requirement in the sense of teaching reading and writing (Academician 1).

> I think times have changed, and now the kids are learning very quickly. In our time, for example, there were no resources that we could use to learn, except for television, and there were only cartoons. Now children's books have changed a lot too. I mean, if you give a pen in the hands of a two-year-old, he/she gets used to it after a while. I think what the life process brings with it has speeded up too. That's why I think early childhood education can be given (Primary School Teaching Student 13).

When it comes to the theme of reasons given for not teaching reading and writing, it is seen that the views of the primary school teaching student produce the most sub-theme within this theme compared to other stakeholders. In this context, it can be stated that although primary school teaching students have a flexible perspective on teaching reading and writing in the early childhood period, they also have strong views on not carrying out reading and writing teaching.

Participants who did not have a favorable view of teaching reading and writing showed several reasons for not teaching reading and writing in the early childhood period. These reasons can be stated as: The practices of preschool teachers and primary school teachers may be different; Preschool teachers may perform erroneous teaching, and for this reason, students may experience difficulties (for example, causing confusion, getting bored, alienating, harming peer relationships) when they start primary school; Teaching reading and writing is not an educational process appropriate to the age of early childhood education students, and it can therefore cause students to feel pressure on themselves and to be prejudiced against the process of reading and writing. The reasons mentioned may have come from the experiences and observation results of the stakeholders. Participant statements on the reasons given for not teaching reading and writing in the early childhood period are presented below.

> ...The fact that many preschool teachers who do not have competence in teaching reading and writing make efforts to teach children reading and writing. I find such efforts very inappropriate. I sometimes think they are choosing this way to glorify themselves or make their work more meaningful. Yet, learning this from a teacher who does not know he should teach reading and writing first, can firstly damage the child's cognitive and linguistic processes and ultimately cause

the child to lose his desire, develop false attitudes and experience academic difficulties in primary school as a result of erroneous learning... (Academician 4)

"Preschool teachers' erroneous teaching causes us to encounter problems from time to time" (Primary School Teacher 15).

It's hard for the teacher, his or her knowing reading and writing while in the first grade, it's hard also for those in the class. And at this age, the child wants to stand out a little bit, he/she wants to come to the forefront. When the teacher asks something, only that child comes out and answers all the questions. Then maybe he gets adverse reactions from his or her peers (Primary School Teaching Student 18).

The distribution of the main themes and sub-themes arising in line with the research participants' views on the effects of early literacy education in the early childhood period by stakeholder views is given in Table 3.

Table 3.

The Effects of Early Literacy Education In the Early Childhood Period

Main themes	Sub-themes	Stakeholders				
	Achieving high academic achievement	A	PST	PT	PSTS	ECES
Impact on academic achievement	Depending on the condition of being supported	x	x	x	x	x
	Helping to concentrate				x	
	Causing low academic achievement	x	x	x		x
	Ensuring readiness	x		x	x	x
	The idea that there is no impact		x			x
	Competence in different disciplines	x	x	x	x	x
	The arrangement of preliminary information with new ones				x	
	Access to information shortly	x		x	x	
Impact on primary school first-grade learning	Ensuring skills development	x		x	x	x
	Having awareness	x			x	
	Disrupting the process of reading and writing	x				
	Causing concern			x		
	Easy adaptation		x	x	x	x
	Overcoming fear				x	x
	Being open to learning				x	
	Getting bored with the classroom learning process	x	x	x	x	x
	Influencing classroom environment negatively				x	
	Being different from classroom learning speed	x	x		x	x
	Having a high readiness	x	x	x	x	x
Impact on motivation	Being an external motivation requirement	x	x		x	
	Causing low motivation	x	x	x	x	x
	Enabling to be enthusiastic				x	
	Providing intrinsic motivation	x			x	x
	Providing high motivation	x	x	x	x	
	Satisfying curiosity	x			x	
Impact on self-efficacy	Self-sufficiency	x	x	x	x	x
	Causing perception of incompetence	x	x			x
	Ensuring high self-confidence	x	x		x	x
	Undermining faith in achievement	x	x		x	x
	Depending on the status of being supported		x		x	x
	Harming peer relationships	x		x	x	x
	Enabling peers to help each other				x	
	Development of language skills	x			x	

Impact on psychosocial development		A	PST	PT	PSTS	ECES
	Those who did not receive an education being shy				x	x
	Development of communication skills	x			x	x
	Vocabulary development			x	x	x
	Feeling confident	x	x	x	x	
	Development of self-expression skills	x	x	x	x	x
	Self-righteousness		x		x	x
	Building positive relationships	x	x	x	x	x
	Causing negative social relationships			x	x	x

A: Academicians; PST: Primary School Teachers; PT: Preschool Teachers; PSTS: Primary School Teaching Students; ECES: Early Childhood Education Students.

In Table 3, the research participants' views on the effects of early literacy education in the early childhood period were gathered under the themes of the impact of early literacy education on academic achievement, on primary school first-grade learning, motivation, self-efficacy, and psychosocial development. Research findings have shown that all stakeholder groups expressed a common opinion within some sub-themes. One of the common themes in question is the view that receiving early literacy education will have an impact on achieving high academic success and becoming competent in different disciplines. Another common view is observed in the sub-themes of being bored with the classroom learning process and having high readiness, under the main theme of the impact of receiving early literacy education on primary school first-grade learning. A similar case exists in the sub-themes of self-efficacy in the context of the impact of having early literacy education on students' low motivation and self-sufficiency in their primary school first-grade life. When it comes to the dimension of its impact on psychosocial development, it was expressed by all stakeholders that early literacy education enables the building of positive relationships and the development of self-expression skills. Because the participant's views on these findings are comprehensive, the citations are presented in subheadings.

Views on the sub-themes of achieving high academic success, becoming competent in different disciplines, and having high readiness:

> As it can be considered together with various disciplines one by one, it is also essential for overall academic achievement and school success. A child who learns to read and write early will be able to devote more time to environmental activities-friend relationships, psychomotor, and affective activities - in school life. His/her school life will not be limited to the instinct of aspiring to be continuously successful and learning to read and write and focusing on lessons, and it will become more fun... On the one hand, a child who receives literacy education, through early literacy, will satisfy his/her curiosity about important issues such as, Why is there such an environment? What are people doing there? What should not be done? and will be prepared for future cognitive, psychosocial processes (Academician 1).

> The way he/she approaches the question, the way he/she listens to his/her teacher, his/her responses and reactions to that question. If there is a game activity there, he/she is in the leading position there. Because he/she already knew about it. It affects his/her sociability and also affects other disciplines. It also enhances his/her motivation and affects math too, because they teach a little math in preschool as far as I know. I think it will have an impact in all areas in general (Primary School Teaching Student 18).

He/she may be more competent in learning areas as he/she will start primary school with a high level of readiness." (Primary School Teacher 2)

Views on the sub-theme of self-efficacy - self-sufficiency:

The child will learn to motivate himself/herself sooner. Because the examples in front of him/her will gradually increase. He/she will be a mighty individual. He/she will be able to know internal and external elements of motivation against difficulties in advance and evaluate them, even though not at a very high level. This also positively affects the elements for achieving success I mentioned above in the following period (Academician 1).

While the teacher speaks about some things, or while letting them write the letters for the line drawing practice, he/she develops a sense of I can do it thanks to his/her work done before in the early childhood education institutions, because he/she got his/her hand in writing. I can do it, and I might manage it, I can do it well, things like this can occur. They'll absolutely observe their friends. Ah, you couldn't do it, but I could, things like this would happen. So they will have self-confidence both socially and as motivation. In the face of being able to read more, write more... if they see that they are doing something, they embrace it enthusiastically, and they want to learn more. They want to grab something. It is also very important in terms of motivation... (Early Childhood Teaching Student 4)

"...He considers himself competent in every sense" (Primary School Teacher 1).

"Those who receive training begin like... self-confident. They think and say because I already know how to read. He/she has a different self-confidence. They act more self-confident, they see themselves as competent" (Primary School Teaching Student 5).

Views on the sub-theme of causing low motivation:

... Practices such as line drawing, writing practices that are structured, have little flexibility, and will not make sense to the child, forcing them to use small muscles, highlighting spelling rules, forcing children to have letter awareness rather than sound awareness unconsciously, negatively affects them. It causes a feeling of failure and incompetence. Their motivation decreases. . Especially in the first grade, reading and writing studies will be performed frequently, so it may create an unwillingness towards school in the future ...(Academician 3)

"Thinking that he/she knows everything, his/her desire to learn can disappear. He/she would have no motivation" (Preschool Teacher 11).

"Their motivation in class can be low. 'Anyway, I already know it, I can do it,' this opinion prevails" (Primary School Teacher 1).

Views on the sub-theme of being bored with the classroom learning process:

Children can be bored. There will be things he/she already knows. I think he/she might break off from school. I've seen examples like this. A friend of mine told me, he started reading at the age of three. When he/she started first grade, he/she felt very good at first. He/she thought he/she was outstanding, and then he/she understood that no matter how good he/she was, he/she had to learn at an average speed, and then he/she escaped from reading a book. His or her writing already worsened, and he/she had no interest in classes (Early Childhood Teaching Student 3).

"If they get early literacy, being ahead of their peers in primary school will cause them to be bored for a year" (Preschool Teacher 11).

"In first grade, he/she will get bored and be behind while others learn" (Primary School Teacher 13).

"If a child receives early literacy education, they may be bored when they start primary school and may not want to attend class. He/she can meet his friends who advance in the reading and writing with the phrase 'I already know,' and this can negatively affect both the child and the classroom environment" (Primary School Teaching Student 3).

Views on sub-themes of ensuring building positive relationships and allowing the development of self-expression skills:

"Maybe they can express themselves better. For example, we use a very low amount of words, maybe not exceeding 500. They can begin to express themselves using more words from very early on. Their communications with the other sides may improve. Or he/she can express his/her self exactly the way he/she wanted to" (Early Childhood Teaching Student 1).

"Recognizing and expressing his/her feelings, empathizing, allows him/her to establish positive relationships. He becomes social, extrovert. He/she can communicate easily. It allows them to start with a high readiness, communicating, as acquiring certain skills" (Preschool Teacher 3).

When the research findings are evaluated from a general point of view, it seems that stakeholders think, similar to the first finding of the research, that early literacy skills should be improved before the process of teaching reading and writing. The view that receiving early literacy education in the early childhood period can provide students with academic achievement in their life of primary school education and that they can be competent in different disciplines may be due to the stakeholders' observations, experience, and their knowledge about academic studies carried out on the issue. In addition to the mentioned finding, the fact that stakeholders also deduced a sub-theme that receiving early literacy education can lead to being bored with the learning process in primary school first-grade learning shows that the two views contradict each other. In this regard, it can be interpreted as the fact that stakeholders who defend the mentioned view may have thought of the concept of early literacy as if it were early reading and writing teaching. It was observed that some stakeholders used the expression of early reading and writing instead of the concept of early literacy. It can be stated in this regard that the stakeholders who play an important role in the process of teaching reading and writing do not have competence regarding early literacy skills, which undoubtedly occupy an important place in learning reading and writing. A similar case was also observed in the finding that receiving early literacy education causes students to have low motivation in the life of their first grade primary school education. These two findings support the interpretation that stakeholders' level of knowledge about early literacy is inadequate.

In Table 4, the distributions of the main themes and sub-themes by the stakeholder views, arising in line with the views of the research participants on the role of preschool teachers in the process of early literacy education in the context of preparing for reading and writing in the early childhood period, are presented.

Table 4.

The Role of Preschool Teachers in Early Literacy Education in the Context of Preparation for Reading and Writing

Main themes	Sub-themes	Stakeholders				
		A	PST	PT	PSTS	ECES
Ensuring the development of skills	Developing language skills as a whole	x	x	x	x	
	Developing thinking skills				x	
	Holding the pen properly		x	x	x	x
	Problem solving skills		x			
	Development of social skills		x			
	Determining the direction of writing			x	x	
Preparing for primary school and reading and writing	Making line drawing practices		x	x	x	x
	Including reading activities	x		x	x	x
	Contributing to muscle development	x	x	x	x	x
	Providing sound awareness	x	x	x	x	x
	Providing reading and writing readiness	x	x	x	x	x
	Ensuring book and pen holding		x		x	x
	Book review studies			x		x
	Providing reading and writing awareness	x			x	x
	Supporting auditory and visual development	x		x		x
	Involving mainly material/activity studies				x	
	Vocabulary development	x				
	Concept Development Studies	x		x		
	Contributing to self-confidence			x		
	Involving sit-down activities				x	x
	Arousing interest in reading and writing	x			x	
	Motivating for reading and writing	x				
	Developing a positive attitude towards reading and writing	x				
	Equipping students with knowledge, skills and attitude	x			x	
Reading and writing teaching activities	Teaching vowels		x	x		
	Teaching numbers		x	x		
	Teaching mathematical concepts		x			
Recommended path to follow	Applying different teaching methods	x	x	x	x	x
	Planning and executing the process with primary school teacher	x	x			
	Not interfering with the learning student	x	x			
	Not teaching reading and writing	x	x		x	x
	Not insisting on teaching reading and writing		x			
	Teaching reading and writing to children who are ready		x			
	Applying curriculum guidelines		x			
	Executing processes appropriate to their age and development			x		
	Consideration of teaching principles			x		
	Ensuring association with everyday life			x		
	Structuring the process according to interest and needs	x				
	Making preparatory studies for life	x				
	Follow-up of academic publications	x				x
	Guiding parents correctly	x				
	Making environmental factors suitable	x				x
	Learning primary school programs	x				
	Having knowledge of reading and writing teaching				x	x
	Making evaluation carefully				x	x

A: Academicians; PST: Primary School Teachers; PT: Preschool Teachers; PSTS: Primary School Teaching Students; ECES: Early Childhood Education Students

In Table 4, the research participants views on what preschool teachers can do in the context of teaching reading and writing and early literacy were gathered under the themes of ensuring the development of skills, ensuring that students prepare for primary school and reading and writing, performing reading and writing activities, and

the recommended path to follow. The research findings indicated that all stakeholders should ensure sound awareness for preschool teachers to prepare their students for primary school and reading and writing. Besides, stakeholders stated that preschool teachers should enable students' reading and writing readiness. Another common sub-theme is within the theme of the path that the preschool teachers are recommended to follow. Stakeholders believe that teachers should use different teaching methods, mainly games, and gamification, in the early childhood period. Some of the participant's views on these sub-themes are as follows:

> They should consider reading and writing skills as inseparable from other language skills, develop associated skills to prepare children for the process of reading and writing, and conduct research to support these skills... In short, they should equip children with the knowledge, skills, and attitudes that will make it easier for children to adapt to the process of reading and writing in primary school (Academician 4).

> Preschool teachers should allow students to perform play-dough kneading, tear and paste work, and cutting with scissors, thus developing their small muscles, and then they should make them acquire the ability to hold a pen. Along with this learning outcome, line drawing practices and book activities should be done from simple to difficult. In this way, reading and writing readiness is provided. Finally, they should make them perform sound-feeling practices. They shouldn't be trying to teach reading and writing (Preschool Teacher 10).

Research findings indicate that there are some themes in common with themes that arise with the views of teaching reading and writing in the early childhood period. It seems that these common themes are the main themes of preparing for reading and writing in the early childhood period, ensuring the development of skills, and conducting some activities related to teaching reading and writing. Besides, the view that all stakeholders think enabling sound awareness, ensuring reading and writing readiness, and applying different teaching methods should be carried out by preschool teachers can be interpreted as the fact that stakeholders are aware that preschool teachers have an important role in literacy development.

The theme and sub-themes arising from the participant's views on parents' role in teaching reading and writing in the early childhood period are presented in Table 5.

Table 5.

The Role of Parents in Teaching Reading and Writing in the Early Childhood Period

Main themes	Sub-themes	Stakeholders				
		A	PST	PT	PSTS	ECES
Supporting the process of teaching reading and writing in the early childhood period	Don't believe that children are smart		x	x	x	x
	Not knowing your children		x		x	x
	Feeling anxious			x		
	Being excited			x		
	Being enthusiastic			x	x	
	Asking your children to learn early	x	x	x	x	x
	Placing importance in academic education			x	x	
	Feeling responsible	x				
	Setting goals for the future	x		x		
	Being influenced by the social environment				x	x
Behaviors for teaching reading and	Teaching efforts on his/her own	x	x			
	Having informing requirements	x	x	x	x	x
	Causing a negative impact on children	x	x	x	x	

writing in the early childhood period	Exhibiting impetuous behaviors	x		x
	Asking for more homework		x	
	Tending to studies that do not support the teaching process		x	

A: Academicians; PST: Primary School Teachers; PT: Preschool Teachers; PSTS: Primary School Teaching Students; ECES: Early Childhood Education Students.

In Table 5, the reasons given for parents to support the process of teaching reading and writing of children in the early childhood period and the distribution of the behaviors they exhibit towards teaching reading and writing by stakeholder views is presented. Participants emphasized that parents have the belief that their children are smart and do not know their children in this regard. In addition, among the reasons parents support teaching reading and writing in the early childhood period, the sub-theme of their asking their children to learn to read and write early was expressed by all stakeholder groups. Furthermore, parents stated that they feel responsible for their children's learning life, aim to set goals for their children's future, care about their academic education and achievement, and are excited and eager for their children to learn to read and write by social environment influence. The research participants emphasized that for the reasons mentioned, parents make an effort to teach their children reading and writing on their own, causing a negative impact on children due to their work that does not support the teaching process. Accordingly, all stakeholder groups stated that parents are required to be informed about the process of teaching reading and writing. Some participant views on the sub-themes presented in Table 5 are as follows:

> The fact that parents do not have enough knowledge about reading and writing processes, that teachers lack in informing enough about the process of preparing for reading and writing, leads to the teaching reading and writing being inconsistent and not supporting each other. I think that many parents perceive their child's learning of reading and writing during this period as a superiority (Academician 4).

> "Parents are happy with children's knowing how to read and write, and they often ask us: Do you teach, too? It would be nice if you teach... But when I talk about the conditions and give an example from myself, some of them agree..." (Preschool Teacher 7)

> "Because parents do not have enough knowledge of the technique, they are performing false teaching before the first grade. They are teaching the sounds wrong, they are teaching to write the direction of the letters wrong. They should be told that this should not be done in this way, they should be informed" (Primary School Tacher 8).

When considered from a general perspective, the research findings indicate that all stakeholder groups believe that parents directly impact teaching reading and writing in the early childhood period. When the results are examined, it can be stated that stakeholders often touch upon the negative aspects of the impact of parents on the process of teaching reading and writing. Indeed, the preschool and primary school teachers, the two important stakeholders of the applied teaching process, stated that parents need to be informed about early childhood and literacy education by emphasizing the negative impact of parents' lack of knowledge on the teaching

processes carried out in the period of the early childhood and primary school. The findings also show that stakeholders believe that parents do not exhibit a behavior toward not being taught how to read and write. In this regard, it can be stated that stakeholders think that parents support teaching reading and writing in the early childhood period.

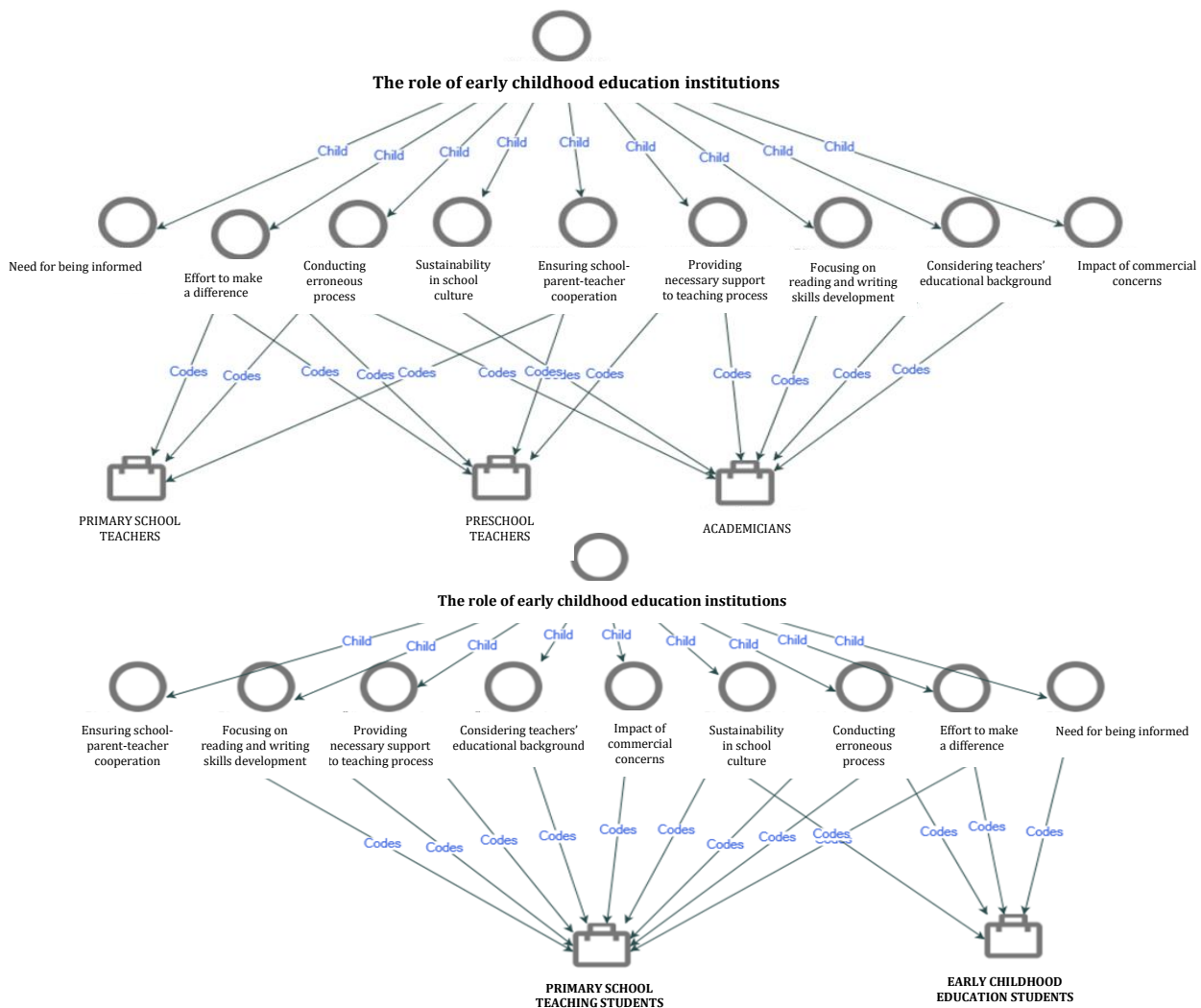Stakeholder views on preschool education institutions' role in giving early literacy education are shown in Figure 1.

Figure 1. Preschool education institutions role in giving early literacy education in the context of preparation for reading and writing

There are nine sub-themes under the main theme of preschool education institutions' role in providing early literacy education in the context of preparation for reading and writing. Like the theme of the role of parents in teaching reading and writing in the early childhood period, the research participants emphasized that preschool

educational institutions are required to be informed by teaching reading and writing. The research participants noted that preschool education institutions planned reading and writing teaching activities due to commercial concerns and thought of making a difference, but caused erroneous teaching processes to be conducted. In this context, it was emphasized that preschool education institutions could play an important role in providing the necessary support by concentrating on the improvement of reading and writing skills, rather than focusing on teaching reading and writing. The participants also stated that the process should be designed in the institutions by considering the educational background of preschool teachers. Some participant view on the mentioned sub-themes are as follows:

> "We can see that preschool educational institutions are implementing practices on this issue because of commercial concerns and the thought of making a difference, ignoring the children's developmental suitability." (Academician 3)

> "Institutions do this to make a difference. We are different from other schools, we teach in ahead of them. I don't think they think of children..." (Early Childhood Teaching Student 1)

> "Early Childhood Education Institutions should be informed that it is early to teach reading and writing in the early childhood period and that this education should be given in the first grade..." (Preschool Teacher 2)

Considering the research findings from a general point of view, it is seen that the stakeholders involved in the study attach importance to the role of preschool education institutions in the development of literacy skills. However, stakeholders believe that early childhood education institutions need information about reading and writing teaching, and that teaching reading should not be used for advertising and so on.

Conclusion and Discussion

We believe that this study is the first in its field in terms of participant diversity since the research results could be evaluated in a common body and comprehensively. In other studies in the literature, it is noteworthy that important stakeholders were not included in working groups and sampling.

In this study, which aims to reveal different stakeholder views on early literacy education in the context of teaching reading and writing in the early childhood period and preparation for reading and writing, the research results were presented in five dimensions in the light of the findings. The first dimension of the research results was the evaluations of the participants about teaching reading and writing in the early childhood period. The second dimension is the evaluation of the impact of early literacy education in the early childhood period, and the third dimension was the evaluation of the role of preschool teachers in the early literacy education process in the context of preparation for reading and writing. In the subsequent presentation of results, the role of parents in teaching reading and writing in the early childhood

period and the role of early childhood education institutions in giving early literacy education in the context of preparation for reading and writing will be evaluated.

Considering the first dimension of the research results regarding teaching reading and writing in the early childhood period, it was concluded that all groups of participants, except prospective early childhood education students, have a more flexible perspective. In the literature, views regarding the age and school level projected to teach reading and writing vary according to the period that the research results were obtained and the theoretical theories (Gunes, 2003). In Turkey as well, there are different opinions about the age at which reading and writing should be taught. Yangin (2007) stated that six-year-old group children in the early childhood education are not ready to learn writing, while Oktay (2013) argued that children with high intelligence levels can learn reading early in the early childhood period if they are interested and provided with proper help. It is seen as stated in the preschool education program (2016) that the aim is to gain the necessary preliminary skills in reading and writing learning without the realization of teaching reading and writing in early childhood education is reflected in the literature; and this, in turn, led to research being conducted in the context of preparing for reading and writing in the early childhood period, and a limited number of studies being carried out on gaining literacy skills in the early childhood period.

Developing technology and easy access to information have allowed many academic skills to extend back into early childhood periods. It is asserted that children's access to various advanced technologies in the early childhood period has an impact on the development of their early literacy skills and encouraging them to read in the early periods (Kolucki & Lemish, 2011; Neumann, 2014). In this context, designing the process of teaching reading and writing based on the criteria of early literacy skills development in a way that is not very age-sensitive has become necessary today. In this regard, the fact that research participants have a more flexible perspective on teaching reading and writing in the early childhood period is an acceptable and anticipated result in today's conditions. In fact, considering that the number of students who come with some of the literacy skills in the early childhood period has been increasing and the attention needs of the students are beginning to be reshaped; it would not be wrong to state that it is more important to approach the teaching process skill-oriented, without putting the age that is justified in teaching reading and writing in the center.

Another consequence of the research is that stakeholders think students should be prepared for primary school, and the reading and writing process, rather than reading and writing instruction. There are studies in the literature that show parallelism with the results of this research (Bircan, 2019; Taskin, Sak & Sahin, 2015; Tugluk et al. 2008; Yılmaz Bolat, 2019). It is also stated in some studies conducted that the teaching of reading and writing is carried out in the early childhood period (Bircan, 2019; Esen-Aygun, 2019; Razon, 1986; Razon, 1987; Sahiner, 2013; Tugluk et al. 2008). In this study as well, the view of some preschool teachers that teaching reading and writing in

the early childhood period can be done overlaps with the results of the research previously mentioned.

The fact that primary school teachers defend solely teaching reading by separating writing from reading in the early childhood period may lead to some problems in the teaching reading and writing process and prevent the holistic development of language skills. However, reading and writing language skills are acquired together (Kavcar, Oğuzkan & Sever, 1995). Furthermore, the development of all language skills (reading, writing, speaking and listening) as a whole is very essential for language development. Some researchers point out that reading and writing skills do not improve equally if reading and writing are not learned holistically (Basar, 2013; Eminoğlu & Tanrıkulu, 2018). For this reason, it can be stated that the primary school teachers who support teaching reading and writing in the early childhood period overlook the dimension of teaching reading and writing simultaneously.

Considering the results of the research, some studies show parallelism with the reasons presented for not being taught reading and writing in the early childhood period (Basar, 2013; Bay and Simsek Cetin, 2014; Bozgun & Ulucinar Sagır, 2018; Sahin, Sak & Tuncer, 2013; Taskin, Katranci & Uygun, 2014; Yapici & Ulu, 2010). For example, Bozgun and Ulucinar Sagir (2018) mentioned in their research that first-grade teachers have difficulty correcting inaccurate learning that occurs in the preschool education, so preschool teachers should not talk especially about the teaching of letters at all. Similarly, Yapici and Ulu (2010) concluded their research that primary school teachers should not do these studies since they perform preschool teaching. Bay and Simsek Cetin (2014) concluded in their research based on the views of primary school teachers that some of the skills that were wrongly learned during studies in preparation for writing in the early childhood period caused children to experience difficulties when starting primary school.

It is noted that preschool teachers who support the justifications advocated by stakeholders for not teaching reading and writing do not have enough knowledge of the preparation for reading and writing or do not adequately reflect their existing knowledge into practice (Bay & Şimşek Cetin, 2014; Erdogan, Ozen Altınkaynak & Erdogan, 2013; Hindman & Wasik, 2008). In this respect, another result of the research was that preschool teachers can perform teaching reading and writing depending on knowledge related to teaching reading and writing; and this finding can offer an opportunity to solve the problems mentioned in the literature.

In the context of the second dimension of the research, the results related to the impact of early literacy education in the early childhood period on academic achievement, first-grade primary school learning, motivation, self-efficacy, and psychosocial development were achieved.   The conclusion that stakeholders encourage the improvement of early literacy skills before the teaching reading and writing process and believe that studies should be carried out in this direction is very significant. Indeed, the literacy skills acquired before teaching reading and writing are considered necessary in teaching reading and writing. The preliminary skills required to acquire

reading skills do not appear immediately, but are shaped in the process (Bodrova & Leong, 1996). In this context, supporting early literacy skills is essential in the development of reading and writing skills.

The conclusion that early literacy education will be effective in ensuring academic achievement in future learning and ensuring competence in different disciplines overlaps with various research results in the literature (Langeloo et al., 2019; Nation et al., 2010; Piasta et al., 2020). On the other hand, the conclusion that stakeholders receiving early literacy education can have a negative impact on academic achievement, causing children to be bored of the classroom learning process and leading to low motivation is contradicted by the result of previous research. The results make us think that stakeholders confuse early literacy education with early reading and writing teaching. There are also research results in the literature that show that teachers and prospective teachers make sense of the concept of early literacy as early reading and writing learning. For example, Altun and Tantekin Erden (2016) concluded in their research that preschool teacher candidates do not feel themselves sufficiently knowledgeable about the concept of early literacy and that they define early literacy as knowing how to read and write before children started primary school and received no formal education. Similarly, Ozdemir and Bayraktar (2015) noted that teachers in training are unable to identify the relationship between early literacy and reading and writing skills. Ergul et al. (2014) also agreed with the conclusion that teachers define the concept of early literacy as reading and writing learning in the early childhood period. In this context, similar to other research in the literature, the research result indicates that stakeholders who play an important role in the process of teaching reading and writing do not have a sufficient level of knowledge about early literacy skills. In this respect, for stakeholders to gain professional and subject matter knowledge aimed at improving early literacy skills, which have an important place in reading and writing learning, it is important to include the necessary practices in curriculum and professional development programs.

When it comes to the third dimension of the research results regarding the role of early childhood education teachers in early literacy education in the context of preparation for reading and writing, it was concluded that the stakeholders mentioned the roles that early childhood education teachers should play in the context of improving their skills, preparing children for primary school, reading and writing, performing activities on teaching reading and writing, and the way forward. The research results point out that all stakeholders believe that early childhood education teachers should perform studies in the early childhood period to ensure the sound awareness and readiness to read and write of their students in terms of preparing them for primary school, reading and writing. In this context, stakeholders seem to be aware of the need for early childhood education teachers to play an essential role in literacy development. According to the research results, it is significant that stakeholders refer to the development of early literacy skills such as writing awareness, sound awareness, and enhancing vocabulary knowledge in the early childhood period. As a matter of fact, teachers' awareness of early literacy is important in terms of ensuring that children can

start reading and writing more readily, thus making it easier for them to learn reading and writing hence higher academic achievement (Dennis & Horn, 2011; cited by Ergul et al., 2014). Similarly, it is stated that supporting early literacy skills in the early childhood period contributes to students' reading and writing skills in their later educational life (Cabell et al., 2010; Catts, et al. 2015; Goodrish, Lonigan & Farver, 2017; Whitehurst & Lonigan, 1998). At this point, the early childhood education teacher position becomes important in early literacy education. For this reason, stakeholder's belief that early childhood education teachers should play a role in the development of early literacy skills seems to be important. Because the teacher's interactions with the child have a positive impact on children's reading and writing skills (Mayer, 2007, cited by Alisinanoglu & Simsek, 2012).

The fourth dimension of the research results regarding the family's role in the issue indicates that the stakeholders think parents directly impact the teaching of reading and writing in the early childhood period. Indeed, children gain their first experience of reading and writing through interactions with their parents. Parents' reading and writing experiences with their children and the enriched stimulus they offer them not only enhance children's willingness to reading and writing but also help support the development of their ability to get to know, understand and interpret reading and writing materials (Yazici, 2002). In short, the qualified time that parents spend with their children in the early childhood period affects their processes related to reading and writing (Uyanik & Kandir, 2010).

Research results confirm that parents support teaching reading and writing in the early childhood period. Also, stakeholders who interpret the reasons for parents to exhibit reading and writing behaviors as they want their children to learn reading and writing at an early age, emphasize mostly negative aspects of the impact of parents on the process of teaching reading and writing. Stakeholders believe that parents need to be informed about the early childhood period and teaching of reading and writing, emphasizing the negative impact of parents' lack of knowledge about the educational processes carried out in early childhood and primary school periods on children. Aygun-Esen (2019) states that children who are forced to learn reading and writing in preschool education institutions or the family environment may have a negative outlook on school. It is stated in some studies in the literature that what parents expect from teachers in the early childhood education period is to teach their children how to read and write (Bozgun & Ulucinar Sagir, 2018; Donmezler, 2016; Eminoglu & Tanrikulu, 2018). So the parents' expectations lead some early childhood education teachers to give reading and writing education (Eminoglu & Tanrikulu, 2018). Another result of the research is that parents attach importance to academic achievement and education, and their views on setting goals for their children's future lead them to tend to teach their children reading and writing, and therefore to experience erroneous learning outcomes for their children. Although the results are assessments arising from the professional experience, observations, and living conditions of stakeholders, there are studies in the literature that support stakeholder views (Adıgüzel & Karacabey,

2010; Eminoglu &Tanrikulu, 2018; Esen-Aygun, 2019; Erbasan and Erbasan, 2020; Uslu, 2014; Yigit, 2009).

Considering the final dimension of the research results, the assessment of early childhood education institutions' role in the realization of early literacy education in the context of preparation for reading and writing, it was concluded that preschool education institutions need to be informed about the process of teaching reading and writing. The stakeholders believe that the activities of teaching reading and writing of the early childhood education institutions lead to erroneous instructional processes due to the impact of commercial concerns and their ideas of making a difference; however, they also think that preschool education institutions should play an essential role in providing the necessary support for early literacy education by focusing on the development of early literacy skills rather than teaching reading and writing. As a matter of fact, the interviews conducted by Aygun-Esen (2019), with preschool education institutions, showed that some preschool institutions have taught reading and writing to children aged 5-6 years. Contrary to the aforementioned point, some preschool institutions explain the objectives of preschool education on their websites to inform parents, emphasizing that the purpose of preschool education is not to teach reading and writing. This kind of information activities gives the impression that parents can come to preschool educational institutions to demand reading and writing instruction.

Parents with different socioeconomic levels, educational status, lifestyle, or different characteristic, may have different expectations from preschool educational institutions. For example, Ozen Altınkaynak and Burns (2014) stated that among the expectations of parents regarding the development of their children who continue preschool education, is for preschool education institutions to provide their children with reading and writing skills. Similarly, in his research on parents' expectations from kindergartens, Seyfullahogulları (2012) concluded that parents expect behavioral development from kindergartens, and the highest expectation after this is related to teaching reading and writing. It seems that these results also overlap with the results of this research. Stating that the focal point of their expectations as a parent in early childhood period is social psychology, child development psychology, and family education, Aibao, Xiaofeng, and Hajime (2007, cited by Ozen Altinkaynak & Yaniklar, 2014), point out that these expectations affect the mental and physical development of children. It is clear that for parents who have expectations their children cannot meet, will negatively affect their children's development. For this reason, parents should take into account their children's abilities and capacity while determining their expectations by being aware of their children's developmental characteristics.

The research results indicate the assessments of significant stakeholders in the teaching process of reading and writing and before it. By incorporating parents and early childhood education institution managers as relevant stakeholders, primary viewpoints of parents and preschool education institutions can be obtained in teaching reading and writing, and early literacy in the early childhood period. Also, conducting

interviews with children in the early childhood period will provide longitudinal results for studies in the dimension of the observation of teaching processes and improving the teaching of reading and writing and early literacy skills in the early childhood period.

On the one hand, the fact that literacy and its types are changing every passing day points to alphabet literacy, while on the other hand, it points to the need for developing literacy skills in early childhood. It is therefore important that current literacies are reconsidered with early literacy skills. In the developing world, it is essential that age is not determined as the only factor in teaching reading and writing, and that the process is designed by taking into account the criterion of the development level of early literacy skills.

It can be concluded from the research results that stakeholders who play an essential role in literacy skills must have knowledge of early literacy and teaching of reading and writing by being aware of the changes and developments in literacy processes. Furthermore, an increase in the cooperation between stakeholders who are competent in this issue and the reshaping of pre-service and in-service training related to early literacy within the current literacies is recommended.

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Production of Representative Spaces in Architectural Education through Instrumentalization of the Concepts of Ekphrasis and Hermeneutic

Özlem ŞENYİĞİT*

Abstract: Nowadays, architecture has been inquiring about the production of meaning and representation in architecture in addition to building technology and spatial organization. In this study, the ekphrasis and hermeneutics reading methods, which were acquired from different disciplines, were used and analyzed as instruments for producing representative space in architectural education. This study aims to use the concept of ekphrasis as an instrument, which transfers meaning between written representation and the production of representative spaces. In this context, the spaces mentioned in the novel by Ayn Rand entitled "The Fountainhead" were transformed into representative spaces using hermeneutics reading by the students of architecture. In a sense, this study aims to create the fusion of horizons between the the author's discourses about the architectural environment in the novel and the reader (students of architecture). It was observed that this study enabled the establishment of a strong bridge among the student, space, and literature. Each new concept, such as ekphrasis and hermeneutics, would add new meanings to the instrumentation design education and enrich the styles of thinking and performing.

Keywords: Ekphrasis, hermeneutic, architecture education, Ayn Rand, fountainhead

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Introduction

Nowadays, architecture has been discussed on the basis of the representation of architecture in different disciplines. Architecture produces meanings in various platforms, thereby diversifying and multiplying its expression through the relationships of these meanings with many fields of life such as art, philosophy, science and literature, and through the meanings reproduced on the basis of these relationships. Therefore, it transforms into a representation and disclosure that is expanding continuously. The inquiry of architectural representation in the world of design requires architectural education to be redesigned. In this context, the concepts, values, methods, and elements related to different disciplines could be used in architectural education to produce, analyze, and interpret the architectural design. This would provide the enrichment of the repertoire to be used by the student for interpreting and transforming the meaning as well as improving creative thinking. Architectural education's main objective should be to enrich the probabilities and open them for discussion, rather than making definite expressions.

In this context, this study is considered as an essay that has been developed to question the architectural education concerning the conditions mentioned above. This essay is also aimed to be developed within an interdisciplinary relationship and a mutually permeable structure. In this framework, the meanings produced by architecture and representation, the relationship between verbal and visual representations, and literature tools in architecture have been identified. The concepts of ekphrasis and hermeneutics which are used as tools for interpretation between different disciplines, have a suitable potential for communication to achieve this purpose. Ekphrasis has particularly been used as a popular tool between architecture and literature due to its visual-verbal representation relationships. In this regard, this study aims to instrumentalize ekphrasis and hermeneutics concepts and discuss the possibilities that this perspective could create in architectural education.

This study aimed to produce physical (drawing, model) representative spaces by using the texts, which depict the spaces mentioned in Ayn Rand's novel, "The Fountainhead". The purpose is to look at architecture from the perspective of literature under the roof of architectural education. The concept of "ekphrasis" is examined on the basis of the architecture-language, space-text contexts, which set the course of the study. This study will discuss the answers to the following questions based on the transformation of the space created in the text into a physical (drawing, model) representative space:

- How could we benefit from literature and philosophy concerning representation in architectural design?

- Is it possible to experience and produce a physical representative space (drawing, model) based on a space created in a text?

- How could ekphrasis and hermeneutics be included in architectural education as tools for producing representative spaces?

Scope and Methodology

Architecture is a discipline that interacts continuously with other disciplines and enriches through multidimensional inquiry. This study aims to perform the spatial design within the context of architecture, literature, and philosophy. In this context, the questioning and experiencing architecture, literature, and philosophy within the design education lead to the necessity that space should be reviewed in its physical dimension as well as its dimension of visual-verbal space. Literary works shape the space as a means of expression to better transfer the plots to the reader. In the literature, it is a common method to create real or imaginary spaces in the readers' minds and ensure that they experience these spaces. This enables the fictional architectural expressions and spaces to turn into messages waiting to be understood.

The method of this study involves a literature review, reading, experiencing and discussion. The concepts of ekphrasis and hermeneutics, which are the methods of experiencing in this study, were analyzed regarding their definitions, existence and their radius of action. Then, the association of ekphrasis with the representative space production would be discussed within the framework of an experimental study in architectural education. In this study, ekphrasis was instrumentalized within the relationship established between architecture and literature (verbal-visual), and the concept of representative space was emphasized frequently. Therefore, the writing domain spaces, which were fictionalized and depicted in words within the texts in the literature, were tried to be transformed into visual representative spaces.

Fusion of Horizons: Architecture and Literature

Literature is a textual repertoire that strengthens the relationships between collective memory and spaces. To understand the relationship between architecture and literature, it is necessary to look at how the meanings produced by these two fields of art intersect. Given that the essence of one is visual and that of the other is textual, it may not be very easy to establish a relationship between these two disciplines the first glance. However, literature and architecture often come together within the framework of "representation". How architectural space is represented and interpreted in the narrative, what architecture contributes to the narration as a tool of representation, and how it finds an existence for itself as a part of the imagery in work are worth examining from the perspective of both the architect and the person of letters. In both of them, there are issues to be narrated and reader-user experimentation.

Discussing architecture and literature, Gadamer states that meaning is essential for both branches of art. Meaning in architecture is related not only with function and its relationship with the environment but also with the time it points out in the course of history. He also does a similar reading for literature. To him, literature is situated at a borderline between pure aesthetic thought and time-space which is also represented by architecture. Just like architecture, literature also has the potential to make things of the past available at present. Spurr (2012) underlines these two important points that he bases on this philosophical foundation; the first of these is that both fields of art define the world we live in, and the second is that art in a general sense is a cultural phenomenon that represents social and cultural meanings that are innate in its nature.

According to Gadamer, the fusion of the horizons of the past and the present during the act of understanding and consequent blending of the interpreter's horizon with the meaning horizon of the text to be interpreted is necessary; that is, the text should be blended with the horizon of the meaning (Japp, 1995). As can be inferred from all these, interpretation means the interpreter's evoking the texts that stand out there independent of him, and in a sense, giving them life. Each text comes into the light again in the language of the interpreter. This is not a reproduction, but the fusion of the horizons (Çağan, 2007). The interpreter cannot interpret a text independently of his/her own life and expands the text by blending it with his/her own experience. The question and answer dialectic ensured the fusion of the horizons. What makes this possible is that both are universal and exist in the being. Thus, in the encounter with the horizon of the text captured in reality, it enlightens the individual's own horizon and guides him/her to open up and understand himself/herself. Language is used as an instrument that is related to such a universality in which horizons blend with each other (Palmer, 2002). What Gadamer refers to as "the fusion of horizons" is the rapprochement of the individual's inner world and the inner world of the text to each other. Literature is a textual repertoire that strengthens the relationships between collective memory and spaces. It creates new understanding practices by penetrating the meaning layers of spaces. It carries traces of social breakages (Sönmez, 2007). Therefore, it is necessary to see the relationship of architecture with literature as an instrument that develops understanding architecture and productive skills.

What Ekphrasis and Hermeneutic Thinking Correspond to in Architecture

Ekphrasis: Definition, Concept

As a literary concept, Ekphrasis means explanation, and it is a Greek word derived by combining the prefix "ex-" (out) and the verb "phrazein" (point out, explain) (URL 1). The origin of the term ekphrasis, which started to be referred to more frequently in Western literature especially as of the 20th century, dates back to Ancient Greece. Oxford Classical Dictionary defines ekphrasis as the "verbal representation of something"

(URL2). W. J. T. Mitchell, who studies the concept of Ekphrasis intensively, defines it as "verbal representation of visual representation, giving voice to silent objects of art, presenting a rhetorical depiction of a work of art, and verbal depiction that aims to bring (reminisce) the picture to the attention of the mind" (Mitchell, 2005, p.127).

The concept of ekphrasis has been translated to Turkish by Dr. Özkan Çakırlar as "resimbetim" (pictorial depiction). Uzundemir, on the other hand, defines the concept as "written representation of a visual work of art that deals with the relationship between two different fields of art, one of which uses colors and shapes, and the other of which uses words and appeals to senses, emotions and imagination through visual images or writing (Uzundemir, 2010, p.13). According to a definition adopted by many researchers, ekphrasis is "the representation of a visual representation through language". Visual representation, which Heffernan mentions and basically includes plastic arts such as sculpture, architecture, and miniature, has been reduced to only the art of painting, and today ekphrasis is perceived in its simplest and general sense as the recreation of the art of painting through poetry (Ulu & Şahiner, 2010). The concept of ekphrasis also deals with the fields of film, photography and architecture as well as visual works of art related with literature such as sculpture and painting. The objects handled in these fields can be real or fictitious. What is important here is understanding how visual arts and literature come together, and the revival of the image from the depiction of a visual image. This can be achieved through poetry as well as prose, story and, as will be addressed in the study, through novels, and it can also be in the form of the depiction of a visual work of art included in the literary text. The concept of ekphrasis, which is increasing attracting the attention of many academics and researchers, has recently gone through an expansion of meaning. Especially studies conducted on poetry are evolving into the application fields of various writing types and visual arts such as painting, cinema, and photography.

Hermeneutics: Definition, Concept

While the term "hermenia", which has been translated into Turkish as "interpretation", is the noun form of this verb, "hermeneutics" is translated into Turkish as "interpretation knowledge" or "interpretation science." The term derived from "hermeneutes" means "translation" and is passed to the western languages over the Latin word "inerpretatio." In ancient times, "hermeneutics" was used in the meanings of "tell", "explain", and "translate", and the common point in all these meanings is "to make something comprehensible" (Palmer, 2003). The history of hermeneutics dates back to all efforts of humanity to understand and interpret all over the period of their existence. Hermeneutics, which started with the Greek philosopher Plato (427-347 B.C.) in ancient times and was shaped within the ancient Greek culture, is an understanding of art as well as a scientific thinking method (Özlem, 2003). With the use of hermeneutics, which appeared in the philosophical works of Schleiermacher (1768-1837) and Dilthey (1833-1911) and could not earn the place it deserved until the 1960s, in the works of Gadamer as a method and Heidegger's using it as a general

method in sciences related to human beings, it has become a model in not only understanding in general but also understanding the entities in the world such as interpreting, explaining and creating a discourse (Şenyiğit & Tefek, 2019).

Accordingly, although it may seem appropriate to translate "hermenia" as "interpretation" concerning the etymology of the term, the daily use and origins of the word point to "analysis" or "explanation." It is seen that especially in daily use, the word has connotations such as "subjectively interpret, subjectively explain, make it subjective or expresses in one's own style" (Sev, 2017, p.78). Within this context, it can be said that "meaning" and "communication" skills rather than "interpretation" outweigh. Hermeneutic approach, which started to influence the world of science and thought as of the mid-19th century, has enriched its classical thought system through feeding on different theoretical frameworks over time and achieved to become one of the traditions that could not be ignored in the academic circles, especially those dealing with social sciences (Gulenc, 2017).

To Gadamer, a work can be understood after it passes through the semantic filter of the reader. The message of the text varies depending on the reader. And this approach brings along polyphony. An understanding independent of human's life, world view, culture, and prejudices cannot be conceived. Understanding and interpretation are realized as a result of the fusion of the horizons of the text and the reader, and thus meaning is expanded. Gadamer names this situation as "the fusion of horizons" (Gadamer, 2002). Fusion of horizons is an open process, and in this process, the same text applies to the lives of different readers in different ways. Although the reader is always the same person, his/her existential ownership of the text leads to different results. As each understanding is a different one, interpretation is revised indefinitely according to Gadamer. Since the target now is not the determination of the text's objective meaning, as time passes by, new meaning horizons of the text appear, and in this way, meaning permanently renews itself in the course of history. In Gadamer's own words, "but the discovery of the real meaning of a text or a work of art is not something to be finalized; it is in fact a process extending into infinity" (Gadamer, 2009, p.48, Varlik, 2017, p.181)

Experiencing is always what is actual/current, what is about to be born, the new one, and what is happening. We see that a sharp distinction is drawn between interpretation and experiencing. "Do not interpret the texts," says Deleuze, "instead of interpreting, try and experience them." He advises not to try to interpret them, but to look at how the texts function, how they influence you, and what connections they make possible. He recommends the reader not to read as if trying to encrypt a code or reveal a hidden message, but to read to involve himself / herself in the flow coming towards him/her, to turn into something else, and to discover his/her own body without organs (Yucefer, 2017, p.193).

Instrumentalization of Ekphrasis and Hermeneutic in Architectural Representation

To Pallasmaa, structures and architectural metaphors frequently appear in poetry and literature. Therefore, an architect can feed on other arts such as literature, painting, and cinema. The images created by these arts can support architectural thought, and even directly use it in the architectural context (Pallasmaa, 2011). As Libeskind puts it, "Architecture cannot exist without literature, language and music" (Libeskind as cited in Maden and Şengel, 2009). In this context, it is envisaged that examining the relationship of architecture with other fields of art, especially with literature over the concept of ekphrasis, and turning the depicted space into representative space in architecture will open new horizons in architectural representation.

There are different forms of ekphrastic space. Texts can basically be divided into two different groups: those that discuss a built space and texts that fictionalize imaginary worlds. In both cases, space is fictionalized again by the reader. In this context, there is a possibility of experiencing a new production of an architectural space produced in the text through ekphrasis. The clash of the person's horizon with the horizon of the text will enable a meaning transfer to form between the text and space. Gadamer says, "reading by understanding is always a reproduction, performance, and an interpretation." Literature, especially its artistic form, the novel can find its original existence only by being read. Besides, Gadamer argues, "No representation but literature carries such strong traces belonging to mind, and at the same time it is so dependent on the mind that is reading it" (Gadamer, 1999, p.160). In this respect, representative spaces in literary texts convey the meaning to the reader through images and metaphors. Some writers and poets who used visual (spatial, architectural) narration have sometimes played an important part in the construction of architectural discourses. The novel by Ayn Rand called "The Fountainhead" is also a significant keystone in the modernism movement's manifesto in this context.

Ekphrasis Space Production in the Context of Ayn Rand's Novel, "The Fountainhead"

Study Limitations and Process

Like in other interdisciplinary studies, it is critical to identify the borders of this study. First of all, the "architectural production" and "ekphrasis" domains are tried to be combined to ensure the combination of architectural education and literature, which is the starting point of this study. The fact that the borders of both concepts are ambiguous and available for expansion enriches the study. The absence of borders brings this study to an experimental level. In this study, the author and philosopher Ayn Rand's novel, The Fountainhead, is examined within the context of the interior

course in architectural education; and, it is aimed to produce representative spaces (ekphrasis spaces).

In the first two weeks of this study, which scheduled as two hours per week, the concepts associated with different contexts, such as space-text, architecture-literature and visual-verbal, were presented by the coordinator of the course (author). The concepts were enriched with the discussions performed during the lesson plan. In the workshops, students were divided into groups of 2-4; it is ensured that all students obtained and read the novel before this study. First of all, the spaces depicted in the novel were tired to be understood and interpreted by the groups. It was then expected that a minimum of three spaces would be identified among the architectural spaces mentioned in the novel to perform analysis and create draft designs and models based on the spaces depicted in the novel. To ensure diversity in the studies, the course instructors ensured that the texts depicting spaces in the novel were studied by at least two different groups. Representative spaces were produced based on the depictions of spaces interpreted by the students through hermeneutic reading, and discussions were made every week on the produced spaces. Therefore, this study was improved on the basis of criticisms. This study was finalized at the end of the semester with the posters and models, which involved drawings and models of the representative spaces. In conclusion, the spaces, which were produced as a result of the ekphrasis readings that intersect architecture and literature during 15 weeks within the framework of the course on interior design at Cukurova University, Department of Architecture, enabled the students to discover the potentials of the relationship between space and text. Therefore, evaluations were made on the transformation of imaginary spaces belonging to the world of literature into representative spaces through a workshop, in which the students used their imagination to objectify the spatial fictions mentioned in The Fountainhead, a novel written by Ayn Rand.

Summary of The Fountainhead

The Turkish Translation 2003 3rd edition of the novel "The Fountainhead" has been used in this study. The novel is about "individualism and collectivism in human's spirit." The protagonist Howard Roark is an architect who strongly adheres to his ideas and ideals, and believes that no one should imitate someone else's style in any area, especially in architecture. All other characters in the novel want him to relinquish his values in varying intensities, but he keeps his determination. A very bright and young architect, Howard Roark is expelled from the school of architecture, although he is in his last year of study. The reason is that he has refused to make drawings that comply with the traditional order of the school. His friend from the school, Peter Keating, who graduated at the top of his class, on the other hand, is praised at every opportunity due to his projects complying with the traditional order, and this situation brings him continuous success. Roark starts to work for the architect Henry Cameron, whom he admires. When Henry Cameron retires and Roark gets in a financially difficult situation, he starts a small office for himself. As a result of his non-compromising style

which does not satisfy the customers, he closes the office and is forced to work at a Connecticut granite quarry. Roark leaves his job at the quarry to design the building (Austen Heller House) of one of the leading persons of New York and continues to work as an architect.

In the novel, other buildings designed by Howard Roark are depicted such as a temple (Stanford Temple), a house planned to be built outside the city (Gail Wynand's House) and Cortland Houses, which is a public house project (he blows off this structure since it was not built according to his plan).

Representative Space Production in Interior Space Design Studio

Real or imaginary spaces and cities mentioned in the literary texts usually create visions in the readers' minds through strong depictions to ensure that the readers feel present in that atmosphere. The five spaces that were mentioned orally through strong depictions in The Fountainhead were transformed into representative spaces by architecture students. In this transformation, first of all, the novel was analyzed in a discussion platform through hermeneutic reading. Then, the design process started for each student, using a modeling technique to express the third dimension. The construct of the design was tried to be explained through the posters.

Text 1: Austen Heller House

"... The house in the drawings looked as if they had been designed not by Roark but by the rock he was standing on. It was as if that rock grew, completed itself, and achieved the purpose it had been waiting for years. The house consisted of broken planes, just like the rock below it. Just as the rock was rising, so was it. Step by step, in masses. Then, all those masses were combining as a coherent whole. The walls were made of granite identical to the rock below. It looked as if they extended their vertical lines towards the air. The verandas made from concrete with large protrusions had the silver color, of silver just like the sea downwards. They were also like the extension of the waves and the straight horizontal line [...]" (p. 99). "[...] "Speaking of which, I also want to thank you for the precautions you took considering my comfort. I see so many things I did not think of. You have planned it all as if you were aware of my needs. My room, for instance, the place which I need the most. You have placed it in a dominant point. I see that it is also a dominant point when looked from outside. Then, that room opening to the library, the living room being away from there, positioning of guest rooms in places where they cannot bother me with their noises. You have thought of me so much [...]" (p. 110).

Table 1.

*Austen Heller House Representative Space Design*
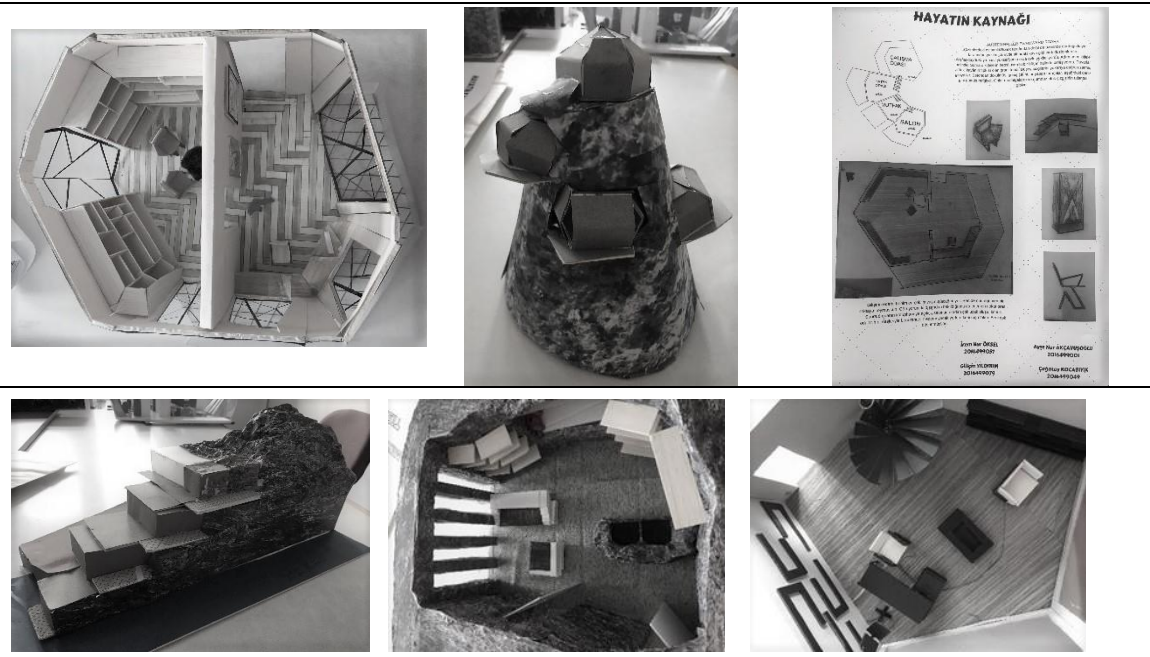
Text 2: Roark's Office

"[...] It was a huge and only room on the top floor of an old building. It had a large window overlooking all roofs. Through the windowsill, he could see the strip of Hudson River. When he pressed his fingers onto the window, tiny tins were passing below his finger like spots. In the room, there was an office desk, two chairs and a big drawing table. It was written on the glass entrance door "Howard Roark, Architect [...]" (p. 103).

Table 2.

Roark's Office Representative Space Design
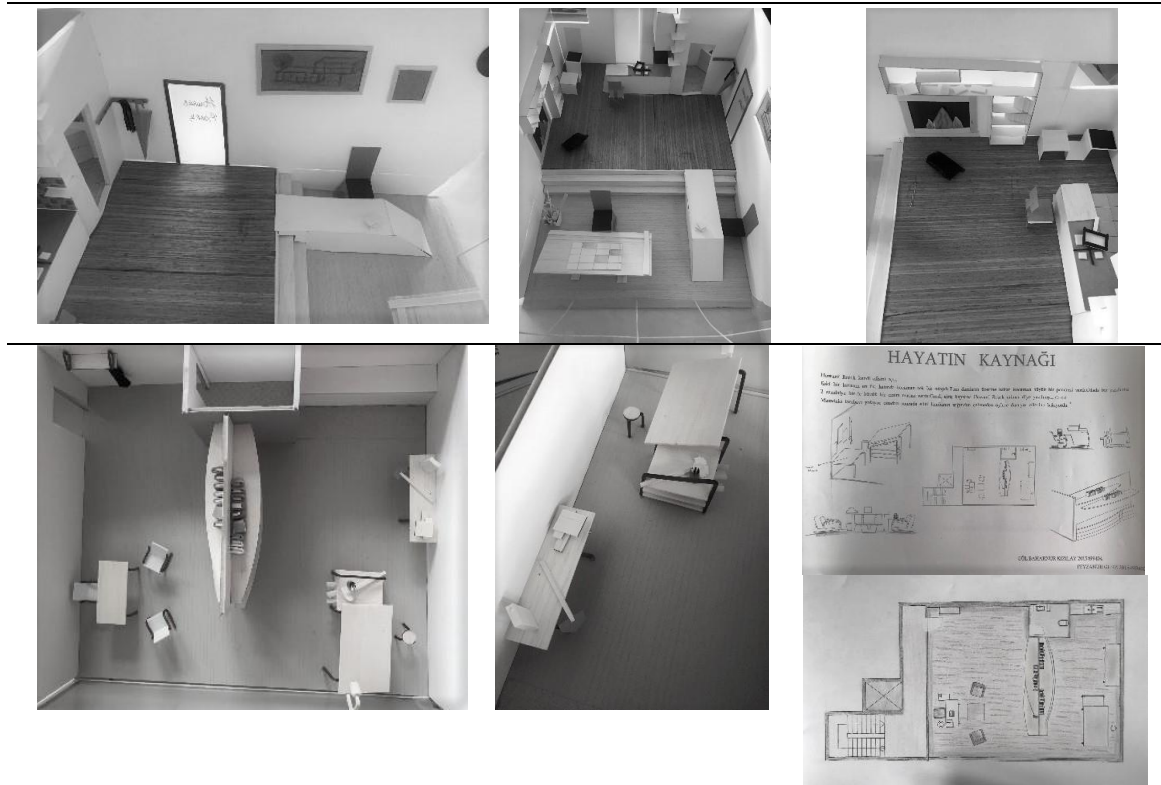
Text 3: Gail Wynand's Loft

"[...] The loft he lived in was on the 57th floor of a big hotel. He was also the owner of this hotel in the center of Manhattan. As he turned his head, he could see the whole city under his feet. The bedroom was a glass cage above the loft. The walls and the ceiling were made of huge glass plates. Whenever he wished, he could cover those walls with light blue curtains. However, was no way of covering the ceiling. While lying on his bed, he could see the stars, watch the lightning and bolts, and feel the rage of rain drops that came up over him and stayed there [...]" (p. 333).

Table 3.

Gail Wynand's Loft Representative Space Design

Text 4: Roark's House

"[...] Where are you staying, Roark? -In a flat.
What is it like? -It is a single room.
What is in it? How are the walls? -Covered with wallpaper. Discolored.
Furniture? -A desk, chairs, bed.
No. Let me know the details. -There's a wardrobe. There is a chest of drawers; the bed is in the corner, next to the window. A big table on the other side[...]
Is it leaning on the wall? - No, I pushed it to the corner of the window and the wall. I work there. There is a chair, an armchair, a floor lamp, and magazine shelf that I never use. I think that's all.
No carpets? Curtains? -I think something is hanging on the window, and there is a carpet. The floor is neatly polished. It is old but nice wood.
I would like to think about your room tonight. On the train [...]" (p. 399).

Tablo 4.

Roark's House Representative Space Design
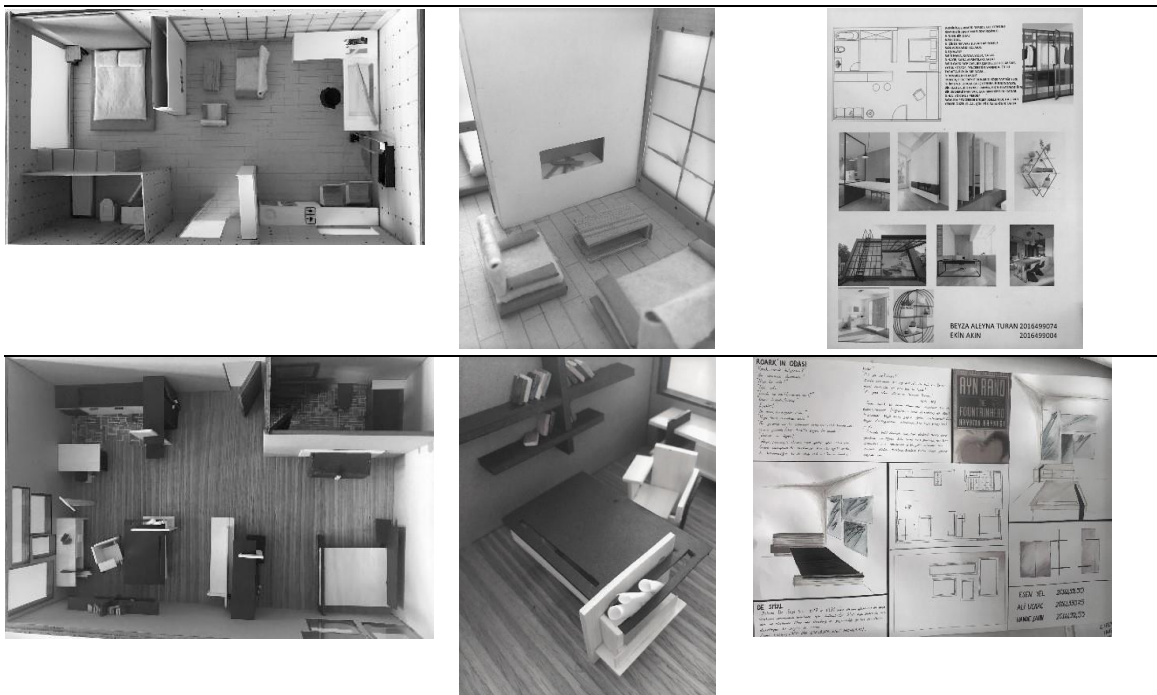

Text 5: Wynand's House

"[...] Wynand's house was on the hilltop across them. The land was made up of terraces, which formed the hill. The house was in the form of perpendicular rectangles and ended with a plane extension. It was in the form of blocks receding step by step. Each of those blocks was a room. The height and shape of each was separating the floor step by step. It was as if it moved slowly from the living room forming the first step, and formed the next step on by one. Each was a little shorter, a little sharper. It was like the movement of the terraces moving up the hill was continuing, being emphasized, speeding up and culminating in a staccato final… I watched the color changing on the walls. While you are drawing this house, Howard are you calculating what the light will do to that house at each hour of the day? Are you in controlling the sun? [...]

[...] The railings she slipped his hand along, the walls surrounding the air he breathed, the switches she pressed on with her fingers in the evening. The light coming through the cables Roark installed in the walls. The fire burning in the fireplace in the evenings in August. In the fireplace he built by bringing stones together like in his drawing [...]

[...] Wynand was watched her walking in the room, going down the stairs, and standing at the window. I never knew that a house could be drawn to fit a woman just like a dress. With each angle and piece, this is a frame for you. Sized according to your height, your body. Even the smell of the walls befits your body smell. It fits strangely. This is Staddord Temple here. But it was built for one person, and it belongs to me. That was what I wanted anyway. The city cannot touch you here [...]" (p. 510)

Table 5.

Wynand's House Representative Space Design
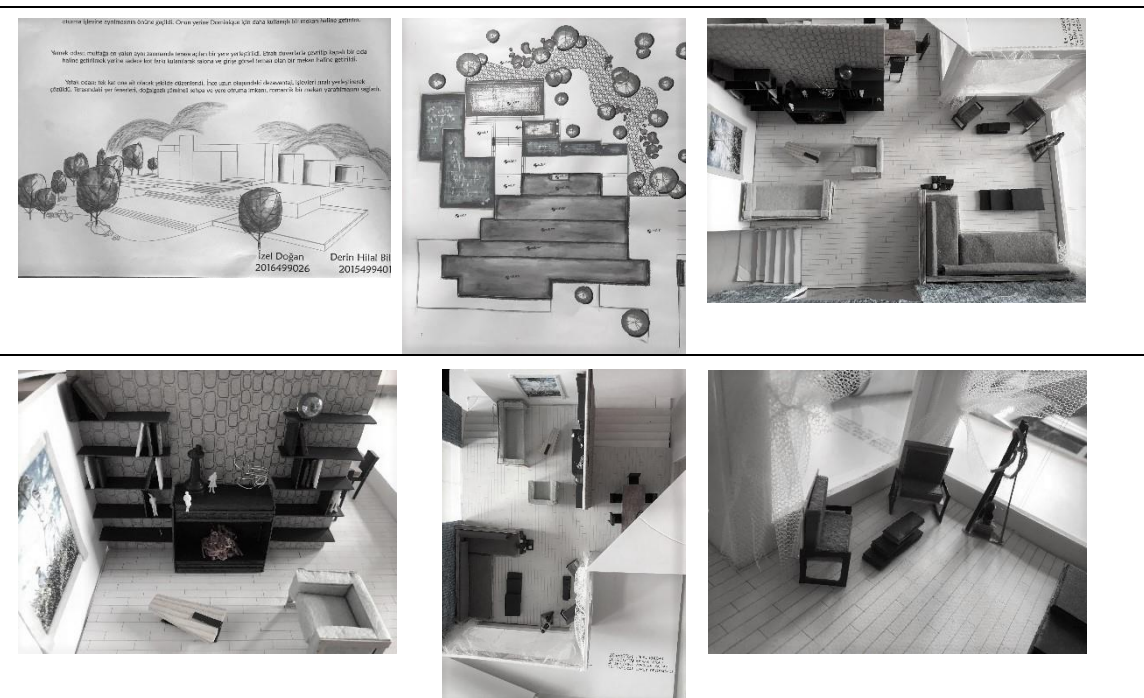
Discussion and Conclusion

Literature builds real or fictional spaces within its own field. Sometimes, this location bears qualifications beyond the existing physical reality and creates images in our minds. Therefore, literature's power to create spaces has been used in different fields within the relationship between architecture and literature. In architecture, which aims to create a new product by compiling information belonging to multiple disciplines, there is the available information on physical space; however, no definite formula is available. The construct of the architectural designs is sometimes produced through clearer methods or sometimes through intuition. This study focused on the transformation of the written text into the physical space. During the transformation of

a textual concept into a physical space based on its contextual traces, it was tired to move the concept to a new location, to attain new meanings and be used.

In the literature, ekphrasis could be defined as the fictionalization or rebuilding of architectural space in literary form; however, there could also be a reverse perspective by transferring a space, which is created for the first time in a literary domain, into the architectural design. The basic characteristics of ekphrasis, which are the relationship of viewer/reader connection, interpretation, storification and the transfer of both structural and contextual content, could be visible in the representative spaces. In this context, the aim was to embody a space mentioned in a literary text in the architectural representation, through ekphrasis and hermeneutics' instrumentalization. Therefore, the use of ekphrasis and hermeneutics became an essential tool in transferring the meaning within the process of evolving a space mentioned in a text into architectural representation.

As observed in this study, ekphrasis could determine a route regarding enabling mutual permeability between two disciplines while creating the field for a flexible and intuitive combination. In terms of the relationship between architecture and literature, this type of reading and the use of ekphrasis and hermeneutics as design approaches in the production of representative space are open to discussion; however, it involves extremely interesting references as a style of thinking. "Instrumentalization of ekphrasis and hermeneutics" in architectural education, which is the thesis of this study, has focused on the use of tools belonging to different fields of art or science, and it has emerged as a field of further discussion. This type of studies could certainly provide freedom for the designer to produce new ideas and establish new relationships. Therefore, the most productive result of this study is shaped around these relationships. In conclusion, it is believed that it would be a productive step to develop an education program based on the experiences where methods obtained from different disciplines are used within architectural education.

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Virtual Education Trials and Evaluation Process in Architecture

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Abstract: The word 'virtual,' which the entire world has become familiar with during the pandemic in 2020, was a phrase that is primarily applicable for higher education in various departments. However, for design students, the online learning medium is a new concept, and the question of how the virtual teaching environment affects the design capability of students is pertinent regarding architectural and design education. This study explores how architectural students' perception of their education medium affects their success in organizational behavior. In this context, an in-depth online interview that aims to understand the perception of architectural students regarding their education medium was conducted to analyze the effects of the learning medium on their educational success. The findings obtained in this study may improve architectural education concerning the virtual teaching experience.

Keywords: Architectural education, sustainable education, virtual education, online learning, higher education, architecture

* ID Correspondence: Van Yuzuncu Yil University, Turkey, ekinoktay@gmail.com
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Introduction

Acts of human beings vary depending on their genetic structure and environmental conditions. There is an ongoing debate in psychology regarding the genetic-environmental factors that may affect and define an individual's ego, self-consciousness, acts, and intelligence. Despite various studies on the effects of genetic and environmental factors on individuals, there is no concrete result that one of them is more effective than the other. However, it has been established that both genetic and environmental factors may affect the individual's behaviour. This is because their acts and actions need a suitable environment. The impact of the environment on human psychology cannot be ignored, and the impact of the situation may change the regular pattern of human behaviour. In the field of environmental psychology, the interaction between the environment and human behaviour has been researched since the 1960s and has reached a milestone in recent years. This field, which studies human behaviour patterns in specific settings, closely interacts with the subject of architecture. There are many results concerning how specific surroundings affect organisational behaviour patterns. At the beginning of the COVID-19 pandemic in 2020, research on the different settings concerning the effects on human behaviour became especially important. From this perspective, the question of how architectural students perceive their teaching environment concerning changing conditions is important, especially while dealing with this global pandemic and the common patterns of generation Z (Gen Z).

Environmental effects on human psychology show common results over generations. Thus, the behavioural questions cannot be examined without considering generational background. Gen Z'ers (digital natives and information curators) who were born between 1995 and 2010 are known for their web-centric attitude, although most of them tend to work individually, as recent studies have shown (Mohr & Mohr, 2017). The generation's learning habits, which depend on the digital world, may influence communication praxis, especially in working groups and class activities. Individualisation, as this new generation renamed, provides a self-structured programme in which one decides to study whenever and wherever he or she wants. The flexibility in place and time paves the way for developing new interests, controlling daily programmes, and establishing deliberate schedules. According to research, their passion for change fuelled by instant information available through the Internet leads to a lack of patience, which is required for rigid working programmes. For example, most of the Gen Z'ers want to work in at least two countries, prefer technology-based learning as technology is considered their sixth sense, most of them attaches importance to new experience, and most importantly, they are willing to improve and are receptive to innovation as they seek to change (Berge & Berge, 2019). Thus, they prefer managing their time and decisions and are always ready for more information; the education they obtain requires altering its system in the light of lifelong education principles regarding the generation's psychological needs.

For a rapid change in existing systems, an external force, such as pandemic disease, is required. As the virus spread all over the world, countries moved to online teaching platforms for university students. However, online education is a phrase that has existed for years. Together with digitalisation, some departments in universities began introducing distance learning through various names, such as mobile learning, e-learning, or a combination of both, known as D-learning (digital learning) (Persada et al., 2019). Students' feedback about D-learning has been studied in various fields, and because of the generation's positive approach to digitalisation, it is expected that the percentage of those in favour is remarkably high. However, the departments in which D-learning has been used are limited. Because of the COVID-19 pandemic, each department had to give it a try. Regarding the psychological behaviours of the generation, it can be said that the expectations of the Gen Zers' from the education system have been addressed during the period. Nevertheless, although they are receptive to change, this rapid transformation has led to conflicts in handling the situation, especially for those studying design.

Design education is a special kind of teaching that is based on studio education and requires both theoretical and practical knowledge to be shared by a master tutor. In studios, different kinds of rituals and teaching methods are seen that require various mediums of communication. For example, in architectural design lessons, the instructor makes some recommendations and corrections by drawing on the project the student is preparing at home. We can say that architectural education is learned by trial and error method (Fig. 1). However, because of the COVID-19 pandemic, universities have moved from face-to-face learning to online learning; therefore, the design courses are being conducted through virtual classes (Fig. 2). As interrelations are important concerning project development through discussions, design education has been affected by online learning because of different channels of communication. Thus, online learning is difficult for design education as it is primarily based on both conceptual and technical drawings and 3D models. Generally, the base idea involves rough sketches of students, and the idea is shaped on the basis of the critical review of the master tutors. This interaction was easier to conduct in face-to-face education. However, in the current situation, this has to be done through online learning, and the attitude of the students is quite different based on their background. This study attempts to determine architectural students' perception towards online learning, especially concerning studio lectures.

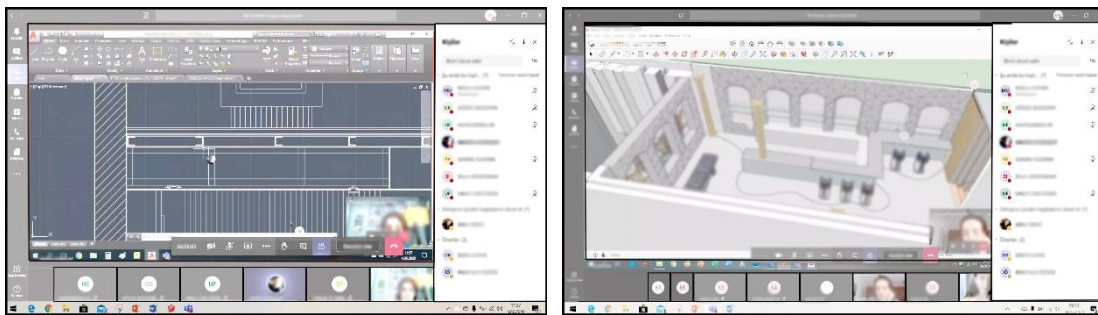**Figure 1.** Face to face education, architectural students

Figure 2. Virtual education, architectural students

While the design department was facing a forced change, studies conducted on digital education systems have gained considerable attention. There are proposals that address the issue of blending technology with the traditional design course environment to achieve a studio course that meets the expectations of the generation. Through surveys, researchers claim that using technology helps reach more students and offers courses that consider the students' personal backgrounds (Bender et al. 2016). Through this, the workload of the faculty stays stable while learning percentages of students advance. Another perspective is that the medium used for conveying information in traditional face-to-face studios includes plotted materials and handout drawings that have a linear structure. On the other hand, in the digital format, a new method for transmitting data offers a parallel structure where the input and output are visible synchronously and asynchronously (Shao et al., 2007). Thus, this supportive environment helps develop various ideas, which are important for design education.

According to Gómez-Zermeño (2020), along with the development of technology, learning resources must be enhanced to meet students'expectations. As assessing information becomes easy, it is important to choose the right information; people should be prepared for this altered environment, as education and Internet technology are key factors in this view. She also points out that for information to be transformed into knowledge, the connection between data and daily life experiences should be constructed, which can be achieved by challenge-based instructive operations (Gomez

Zermeño, 2020). Learning by doing is a method that is mostly seen with Gen Z and it becomes effective with the help of challenge-based learning and empowers self-reliance. Additionally, research has indicated that Gen Zers mostly prefer online and personalized education consumption as micro-experiences (Schwieger & Ladwig, 2018). Based on this, ensuring a more personalized education structure, in which they can access the information whenever they want, can be a solution to retain their interest. Furthermore, because of the very essence of the design courses, they require communication and integration. However, this is not a single information-based area that only teaches the basics; rather, it is a field in which the idea should be examined and discussed with various participants for it to grow (Chen & You, 2010). With Internet technology, it is easier to connect with the masters of various programs and connect students with them through different mediums. Another perspective that supports the idea that design is a field that improves with sharing is that connection and exchange of views between students are important. Therefore, just like face-to-face studios, virtual studios must be structured as they serve a community rather than a regular course that involves one-on-one communication (Broadfoot & Bennett, 2003). Previous research on integrating computation to design courses introduced a website for students, where they could upload their studies so that critical observations of the instructors on each project would be accessible by all students and any design decision made by the student would affect the others, too (Chastain & Elliott, 2000). The development of online education is the need of the century, especially for design courses, while considering the basics of education.

Additional studies have been conducted on the integration of technology with design education. Newman et al. (2018) identified four issues according to the Council of the Educator of Landscape Architecture, especially online learning. These include access, interactivity, online preferences, and concerns about academic integrity. It is accepted that online education has benefits, such as connecting students to instructors across the world, offering the opportunity to reschedule lessons, and increasing student motivation by giving them more control. On the other hand, there is a lack of internal communication, which is important for a design course as new ideas arise from bilateral relations and establish borders for creativity (Newman et al., 2018). The problem of infrastructure is an issue that needs to be addressed as the need for technology-blended education is growing daily. The future seems so clear that concerning technical problems, researchers are attempting to produce a solution for the barriers between online education and students through a cloud-based information system (Kim & Lim, 2019). Attempts are being made to identify possible obstacles and to solve them to create digital education systems that the century requires.

Researchers' concerns about the issue of technological integrity in education are being investigated; at the same time, various studies are being conducted to examine students' interest in online education. George (2018) conducted research on students' performance in a basic hand graphics studio, which is usually an in-class practical lecture but was held online as a part of an accredited landscape architecture program. According to his study, students argued that virtual studios beneficial concerning both

having lectures as shared media for attending later and offering the opportunity to connect with a wide range of instructors during the week (George, 2018). His results provided deep insights regarding the hybrid or flipped course approach for design studios as a possible and influential solution for online design courses, such as graphic courses (George, 2018). In another study held at an interior architecture studio, students examined online and offline courses during a project. Their responses were recorded and analyzed through various aspects, such as psychology. The study shows that most of the students contended more during the offline process, considering the effectiveness of communication concerning avoiding misunderstandings. However, there was no difference in student performance and the project's overall success. It was agreed that a proper interface needs to be structured for online design courses (Cho & Cho, 2014). Therefore, while creating a course program and deciding on the learning outcome, it is essential that the students' perceptions be considered, especially in design courses.

This study aims to investigate the perception of architectural students toward online learning activities. Generally, architecture education is different from other casual learning activities. More specifically, design studios are different environments than other lecture forms. Therefore, the architecture students' attitude towards online studios is important for lecture outcomes. To achieve this aim, qualitative research has been conducted. To find students' perceptions, an online interview was conducted using the Internet. A semi-structured interview form was used. Thirteen students from two different universities responded to the interviews. The students' attitude toward online learning has been determined through several questions. Interviews have been transcribed, and transcripts have been coded with the help of qualitative analysis software, and results have been depicted through coding.

This study has several important implications. First, a qualitative research method has been used to understand how students perceive online learning in this study. Most universities have moved to online learning because of the COVID-19 pandemic. Therefore, this study examines students' reflection towards online design studios based on their perception. Considering this, the intention of the research can be stated as follows:

- To obtain a conscious understanding of online architectural lectures

- To identify essentials required educating architecture students in the online environment

- To examine the architecture students' approach toward online lectures

- To prepare a briefing for architectural design studio instructors regarding online education

- To enhance education in architecture studios by structuring interactive education in online learning

This study aims to identify the perception of architectural students in online learning as part of an interactive community. Therefore, the main problem of this study is "what is the perception of architectural students towards online learning?" The sub-problems are as follows:

- Would they prefer online learning or face-to-face learning?

- How was their reaction to the online drawing lectures?

- How did they find the online studio environment?

Although learning is measured according to the outcome, it is necessary to consider students' perceptions to evaluate a range of variables (Chen & You, 2010). External factors that may affect students' perceptions are important to understand the perceived process for gathering information about the technology integrated design courses.

Materials and Methods

This research a qualitative research method, as architectural students' perception regarding online learning can be better understood through qualitative questions. This method helps address the questions "why" and "how" so that the perception of architectural students can be defined in light ofthese questions. Deeper insights can be gained through qualitative data. Thirteen undergraduate architecture students were selected as research subjects. As this study had a limited number of subjects, a probability sample was not used although purposeful quota sampling was used. To determine their experiences regarding online learning, a semi-structured questionnaire was used. Subjects were asked questions about their perception of online learning, especially design and studio learning. Several in-depth interviews were conducted with subjects, using semi-structured questions.

The interviews ranged from thirty to sixty minutes. Raw data for examining and codification were collated by transcribing the recorded meetings verbatim and typing them into a word processor. Examination and the coding of information were conducted in Turkish and translated into English later to avoid misunderstandings. Some of the impossible articulations in the local language were lost at the interpretation stage, but the fundamental substance was deciphered correctly.

Despite the interpretation of the outcomes causing the loss of certain remarks, the embodiment of the preservation is reflected in the paper. The information was broken down with the assistance of a subjective examination program, NVivo (ver. 10). This information was analyzed by utilizing content examinations, coding, and topical examinations.

Results

The results in the cross-examined tables show that students' ideas for online education in architecture are not stable concerning the advantages and disadvantages.

Findings

More than half of the students preferred face-to-face education (Table 1). For example, AA stated that architectural education be completed only through distance education. DD advocated that it is more logical for project lessons to be held in physical classrooms. EE stated that he prefers face-to-face studio-based education, but it is a preference and cannot be implemented at this point. FF, GG, HH, LL, and MM stated that quality was different, and it was necessary to touch the model for a better understanding. However, a considerable number of participants were in favor of online learning. For example, BB stated that he found it very positive and it was the most productive period; CC found it positive for students; KK argued that online education had many advantages, and NN and PP stated that instructors more easily perceived the produced ideas with the help of technology and that they had more time to improve their projects. Students' sentences included both advantages and disadvantages of online learning; thus, even those who were against online education admitted that it also had certain benefits (Table 2).

Table 1.

Preference for Online and Face-to-face Education

	AA	BB	CC	DD	EE	FF	GG	HH	KK	LL	MM	NN
Preference for face to face	√			√	√	√	√	√		√	√	
Preference for online		√	√						√			√

When the advantages and disadvantages of online education were evaluated, a different picture emerges. This time, the vast majority of students stated that they had advantages concerning time. The interesting point here was that DD EE and MM, which previously advocated face to face education, stated that they had time advantages in online education. In physical studios, critics discussedthe printed drawings, and plotted them before each critic day was a waste of time.

Table 2.

Pros and Cons for Online and Face-to-face Education

	AA	BB	CC	DD	EE	FF	GG	HH	KK	LL	MM	NN
More economical for practical lectures		√		√		√						√
Time advantage for practical lectures		√		√		√		√	√		√	√
Online education is suitable for theoretical lectures			√	√		√				√	√	
Online lectures are not suitable for theoretical lectures	√	√						√				
Online lectures are not suitable for freshman's		√	√						√			
Undeceive because of social facts				√	√		√					

Again, for making rigid models, each piece as drawing for the laser cutter and both drawing them and getting cut takes much more time than modeling the project via 3D modelling programs on computers. DD and FF admit that online education is more economical considering the outgoings for the model material, cutting prices and printout posters although they have chosen face-to-face studios. The main reason behind the preference of DD, GG and PP seems caused by social reasons, such as being apart from their friends. PP says that it was better on physical studios considering their information interchange between friends even they are doing it on the phone, it was not the same. DD argues that being at home prevents studying while it was easier to sit and study together with friends who study with you as well in the studio. Studios are like libraries for architecture students where they can socialize while studying and gathering ideas from each other. Thus, it is hard for them to abandon it although being onlinhas more benefits. Similarly, the following themes indicate that online education is suitable for theoretical lessons and has economic benefits.

A different picture emerges when online education's advantages and disadvantages are evaluated. Most of the students stated that they had advantages concerning time. The interesting point here is that DD, EE, and MM, who previously advocated face-to-face education, stated that they had the advantage of time in online education. In physical studios, critics discussed printed drawings and plotted them in front of the students, which was a waste of time. Again, to make rigid models, each piece was drawn for the laser cutter and drawing them and cutting takes time, which could be

modelled through 3D modelling programs on computers. DD and FF admitted that online education was more economical considering the cost of the model material, cutting prices, and printing posters, although they preferred face-to-face education. The main reason behind the preference for DD, GG, and PP seems to be the social reason, such as being able to meet friends. PP stated that exchanging information between friends was better in the physical space, and although they communicated over the telephone, it was not the same. DD argued that being at home made it difficult to study, while it was easier to sit and study with friends at the studio. Studios are like libraries for architecture students where they can socialize while studying and gather ideas from each other. Consequently, it is difficult for them to abandon it, although online education has numerous benefits. Similarly, the following themes suggest that online education is suitable for theoretical lessons and offers economic benefits.

Interestingly, the number of students who discussed the disadvantages of the critics and the advantages of access is the same (Table 3). Five students gave their views on both themes. As critics are the main tool for design education regarding the conventional transmission of the idea, it is also difficult for the studentsthem to decide whether being online is beneficial. Interestingly, the number of students discussing the disadvantages of critics and the advantages of access is the same (Table 3). Five students gave their views on both issues. Since critics are the main tool of design education concerning the traditional transfer of ideas, it is also difficult for students to decide whether it is beneficial to be online. Thus, the general impression from architecture students is that online education has benefits that cannot be ignored if they were in a social environment because for a design student, being in a social environment still maintains the importance of living and observing in the building.

Table 3.
Advantages and Disadvantages of Online Critics

	AA	BB	CC	DD	EE	FF	GG	HH	KK	LL	MM	NN	PP
Access opportunity concerning the online critics	√							√	√	√		√	
General disadvantages concerning the online critics			√				√				√	√	√
Scale disadvantage concerning the online critics													√
Technological disadvantages	√				√								

Discussion and Conclusions

As online education is a new phenomenon, students do not have a clear idea about it. It is interesting that, although students mostly prefer face-to-face architectural education, they have also acknowledged the benefits of online education. Additionally, the students expressed that online critics are beneficial as they easily access instructors. However, the number of students who talk about general disadvantages is not negligible.

Students are aware that it is good to have the option of online education rather than no education in the new term. Students, in general, are attempting to adapt to the new system. They have identified certain positive factors associated with online education, especially in theoretical lessons. Students state that it is acceptable to have mainly face-to-face education for the first two years, and online education could be useful for the following terms.

Online education is new for students and they tend to become confused. The findings show that even those who advocate face-to-face education talk about online education benefits. From this point of view, the hybrid system that George (2019) has mentioned seems acceptable. In this respect, the findings of this study support the same.The ease of access, another factor mentioned by students, is in parallel with the issues mentioned by Newman et al. (2018). Besides, technological advantages are important concerning sustainability policies, as stated by Gómez-Zermeño (2020).

This study has some limitations. This qualitative study was conducted using interviews with thirteen students. Therefore, the study results are limited by this sample and have primarily attempted to determine how students perceive online education. It is recommended that quantitative studies should be conducted to determine the spread of this perception. Moreover, a widespread survey can be conducted to identify the lectures that can be conducted online and which lectures are more suitable for face-to-face education. This study only considers the opinion of the students. It is equally important to understand how the tutors feel about online learning and the outcome that they get from this.

In the view of sustainability, online lectures are more practical for older students, especially for the 3rd and 4th-degree students. Findings suggest that older students find more practical and productive the project lessons in an online manner. Moreover, they do not need to plot their projects, and they save paper from waste. Besides, they can repeat the critics of the tutor after the online lecture. Thus, they can gain time and budget with online lectures. In addition to these theoretical lectures are more productive than the face to face education. Based on the results, it can be said that online lectures are more sustainable manner than the face to face lectures.

The study findings suggest that a hybrid application of both online and face-to-face education would be beneficial for students. In particular, freshmen who are new at the university and foreign to the design culture would benefit more from this hybrid

application. Basic design and formal drawing courses are different from high school education, and they are based on other architectural courses. These courses should be conducted through face-to-face education. With the help of digital representation techniques, high-grade courses can be conducted through the online course system. Study findings could assist in improving online architectural education.

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Critical Friendship in Self-Study

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Abstract: The purpose of this article is to clarify the concept of the critical friend. It is practically used in self-study research, which is a kind of qualitative study. Self-study as a systematic inquiry helps teachers and teacher candidates to explore and analyze their practices. Self-study as a qualitative research methodology is largely recognized in western countries yet considered relatively new in Turkey. In this article, the history of self-study research methodology is briefly introduced and how it differs from other qualitative research methods is explained. Then, the concept and importance of critical friendship, which is one of the key characteristics of self-study methodology because of its collaborative nature, is explicated. Critical friends are reliable colleagues who systematically provide data to the researcher and at the same time are those who help increase the validity and reliability of the research. Since it is hard for the researchers to reframe their experiences and verify assumptions objectively, critical friends provide pivotal support by asking challenging questions and presenting constructive criticism. For this reason, choosing a critical friend considerably affects the whole research. This article attempts to specify attributes and qualities of a critical friend and answer the question "What kind of a critical friend is needed in a self-study?"

Keywords: Self-study methodology, critical friend, qualitative research

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Introduction

Self-study, emerging as a brand-new research area in the early 1990s and considered rather recent and developing type of qualitative research and methodology, has its roots in three main paradigms: teacher research, reflective practice, and action research (Loughran, 2004.) The first endeavors for the advancement and development of the self-study methodology was carried out in 1992 during the first session of the American Educational Research Association (AERA), which included joint studies of teacher educators and experts in the field of self-study research. The conference attracted the attention of the experts and scholars from teacher research, reflective practice and action research, as well. In 1993, AERA Special Interest Group (SIG) established the Self-study of teacher education practices (S-STEP), and it was an important foundation for furthering the research area (Hamilton and Pinnegar, 1998). Similarly, the first international Castle Conference held in England in 1996 gathering eighty participants from four continents, was considered as a significant contribution to the development of the self-study research. The Castle Conferences are held every two years and the last one was the 12th meeting in 2018 at Herstmonceux Castle near Hailsham in East Sussex, England. Furthermore, the international peer-reviewed journal named Studying Teacher Education, starting publication in 2005, contributes to the development of self-study research by publishing papers on self-study of teacher education practices. In addition, journals such as Teaching and Teacher Education and Journal of Curriculum Studies publish the papers and follow the advancements related to the field of self-study research.

Self-study research, basically, is a "hermeneutic study of self" (Samaras and Freese, 2006, p.12), or to put it in plain English study of the self by the self (Pinnegar and Hamilton, 2009). Likewise, self-study uncovers individual understandings of the practice since the researcher conducting an analysis of self as a research subject studies one's self and actions. Loughran and Northfeld (1998, p.7), argue that self-study is for "genuine reframing of a situation" that includes the critical and systematic analysis of the "texts read, people known, and ideas considered" (Samaras and Freese, 2006, p.12) by the teacher educators and the researchers. Self-study, in that sense, leads to teacher competency since the research enables the subjects (teachers, teacher educators, and researchers) to broadly analyze and comprehensively understand their own practices from an alternative perspective, ultimately contributing to personal and professional development and transformation.

Reflective practice is the most prominent approach that has affected the self-study research. Although self-study is not just a "reflective practice" (LaBoskey, 2004), historically, on the grounds of the reflective practice, teachers have come to realize that they are able to examine and problematize their teaching by reflecting on their practice and by becoming reflective practitioners (Schön, 1987). Thus, the roles of the researcher and the educator are intertwined in the self-study research and become inseparable (Alan, 2016).

Analyzing the papers of the First Castle Conference, Barnes (1998) identified the three main characteristics of the self-study research, namely openness, collaboration, and reframing; and thus, clarified the features that distinguish the field from other types of qualitative research. LaBoskey (2004) expanded the three characteristics of the individual research identified by Barnes and listed five characteristics of the self-study research. Accordingly, self-study is self- initiated and focused, interactive, improvement-aimed, utilizes multiple methods for data collection, and finally provides exemplar-based validation. Exemplar-based validation in this context means the rigor of the research and thus the transparency, the "visibility of the data, methods for transforming data into findings, and the linkages between data, findings, and interpretations" provided by the researcher since "it is the 'reader' who determines the validity of the research" (Pinnegar and Hamilton, 2009, p.99).

Collaborative interactions in the self-study, are crucial for the research process since the research validity is based on rigor, transparency, and reliability. In order to ensure reliability, the researcher should provide evidence and detailed explanations of data collection process and analysis of the findings. Additionally, researcher must be able to describe in detail in what ways the changes and transformation have been experienced (Feldman, 2003). Self-study as transparent and systematic research process requires researchers sharing the activities carried out, findings obtained, and experiences encountered throughout the study. (Brandenburg, 2008; Samaras, 2011). To display transparency, researcher should consider using triangulation for systematic collection and analysis of the data. Moreover, to provide rigor and trustworthiness in research process and thus strengthen the study in general, using an external examiner called critical friend is a must (Mishler, 1990).

Vanassche and Kelchtermans (2015) argue that since the focus of the self-study is the researcher's own practice, qualitative research methods are used in the first place. Moreover, according to Pinnegar and Hamilton (2009), the self-study research is "situated within the terrain of qualitative research" (p.68); and thus, postmodern experience is rather interpreted using post-positivist approaches and methodologies. On the other hand, Mena and Russel (2017, p.109) argue that multiple methods, including positivists methods, such as "observations, interviews, surveys, document analysis, journaling, field notes, blogs, posts or tweets, and e-mails" can be adopted for the self-study since the self-study embraces and acknowledges "multiple" approaches in the context of theory, method, and purpose.

Evaluating the theoretical and practical dimensions of the individual research process, Hawley and Hostetler (2017) summarized five core characteristics of the self-study outlining the implications for the method in Table 1.

Table 1.

Five Aspects of Self-Study with Implications for Methods (Hawley and Hostetler, 2017, p.85).

Key Aspects of Self-Study	Methods Implications
1. Self-study focuses on one's own practice and relies on personal situated theory, it is self initiated and improvement aimed (Samaras, 2011; Vanassche and Klechterman, 2015).	Research focus and questions ought to put your practice at the center.
2. Self-study privileges the use of qualitative research methods (Vanassche and Klechterman, 2015).	Because your practice is the focus, qualitative descriptions and accounts are important data to collect and analyze.
3. Critical friends and collaborative interactions are central to self-study (Samaras, 2011; Vanassche and Klechterman, 2015).	To mediate the effects of nepotism and build rigor,critical friends should be used to help reframe experiences and push learning deeper.
4. Self-study involves a transparent and systematic research process with concrete relevant examples of actual practice to build trustworthiness and establish validity (Samaras, 2011; Vanassche and Klechterman, 2015).	Data collection, analysis, dissemination and critical friend meetings should occur systematically and be well documented. Rich descriptions of these and accounts of actual practices are needed to develop learning outcomes from the study.
5. Self-study generates knowledge and ought to be presented or shared with colleagues for mutual and reciprocal learning (Samaras, 2011).	Because you have developed rich learning outcomes and because taking the time to put words into verbal or written form requires a higher cognitive demand (answering "what did you learn?"), it is important to share your work with colleagues both for the benefit of your learning and for your colleagues who it might resonate with.

The Significance of a Critical Friend in Self-Study

Self-study is an effective method for teachers and teacher educators to develop their own practices and analyze their experiences. Moreover, self-study aims to place one's own practices in a theoretical framework. The main goal of the self-study is to create professional awareness on how teacher educators could transform teacher education; and thus, enhance quality training of the pre-service teachers and teacher candidates (Loughran and Northfield, 1998; Kosnik, Beck, Freese and Samaras, 2006; Samaras, 2011). The notion of a "critical friend" was first suggested by Stenhouse in 1975 (Kember et al., 1997) and then has been described as a "partner", a colleague who provides suggestions to the teacher-researcher in educational action research.

Nevertheless, rather than perceiving themselves as advisors or consultants, critical friends in action research perceives themselves as "friends" of teacher-researchers (Kember et al., 1997, p.464).

Self-study is deep-rooted in methods of reflective thinking, action research, and teacher inquiry (Loughran, 2004). For this reason, the concept of critical friend is also a fundamental feature of the self-study research. Pinnegar and Hamilton (2009) argue that the two main differences that distinguish the self-study methodology from other qualitative methods are the researcher's ontological stance and dialogue. Although the concepts of "individual" and "self" are important in self-study, it is the dialogue that takes place between the researcher and the critical friend differentiating it from other qualitative methods (Alan, 2016; Craig, 2009; Pinnegar and Hamilton, 2009). That is, self-study contrary to the suggestions and connotations that particular designation might specify, is not a process done in isolation, but a process that requires collaboration so that the new understandings of the self could be built through the dialogue and the findings are strengthened and validated (Samaras and Freese, 2009).

Reframing of the beliefs and practices as well as reconceptualizing the role of the teacher is done in an atmosphere where the mutual benefit, support, and trust is established; and thus, making sense of information is achieved through collaborative inquiry, reflection, and dialogue with a critical friend (Fuentealba and Russell, 2016; Samaras and Freese, 2009). Although the knowledge generated or the learning derived from the self-study might be quite individual, the self-study process definitely requires collaboration, and for this reason Loughran and Northfield (1998) call the self-study research a "joint venture". In this joint venture, the participants - critical friends – frame and reframe the interpretations, problems and situations, reveal the biases; and thus, proceeding together throughout the research process, ultimately gain shared experiences and new knowledge.

It is not an easy task for an individual to provide self-criticism objectively. For this reason, researchers may have difficulty in objectively examining, evaluating, and reframing their own practices in self-study research (Loughran and Northfield, 1998.) That is why, researchers always need critical friends who can provide objective perspective considering the problem and situation. Since the teachers and researchers find themselves too concentrated and focused on the process of self-study, missing important points and accepting crucial situations at face value are common; leading to overlooking the actual reasons underlying these situations and thus critical experiences to become neglected. Loughran and Northfield (1998) consider the willingness to present individual practices and the commitment of the researcher to the study including individual assertions and overall research findings for the public criticism and comment as the basic criterion that determines the quality of the self-study research.

Collaborating with others, independent analysis and interpretation of the data, and consequent reflection on the findings clearly increase the reliability and validity of the study. One of the most effective ways to achieve this is to collaborate with critical friends. For this reason, devoted critical friends also contribute to the researcher's professional development by providing decent, honest, and constructive feedback on teaching practices (Alan, 2016). Sometimes, researchers or teachers may find it difficult to realize whether to make the changes and transform their practices or whether the changes would produce effective results. The systematic feedback provided by the critical friend truly provides the researcher with an opportunity to examine the data from a different perspective and through a different lens and thus the researcher critically approaches their own practices. Here, the critical friend is an "advocate for the success of the study" (Costa and Kallick, 1993, p.50).

Since self-study research is based on dialogue, the process of coming to know, respect, and valuing the differences are crucial along with being tolerant of people by "withholding judgment, allowing all participants to express ideas" (Pinnegar and Hamilton, 2009, p.89). That is, the researcher in the self-study must be driven to "seek critique and analysis, the expression of unconventional ways of thinking about ideas, multiple interpretations of evidence, as well as alternative voices." (Pinnegar and Hamilton, 2009, p.89). For this reason, it is crucial to involve the critical friend in the process for the tacit knowledge to be revealed, and the study itself to be critical, productive and constructive. The critical friend leading to reflection, reviewing, and reframing existing practices provides a quite constructivist approach for the study. Given that, the researcher addresses critical friend to question and justify claims about the data, analysis, interpretation, and practice. Thus, the critical friend in a self-study is a valuable authority of data and analysis, as well as a fundamental base, a significant source for the researcher that demonstrates whether his/her personal understanding, thoughts, assertions, and justifications regarding the practices are valid. As a fundamental element of self-study, the critical friend providing a constructivist approach, contributes to the realization of "the process of coming to know" through the dialogue (Pinnegar and Hamilton, 2009).

Dialogue by nature is open to criticism since it includes critique. Moreover, critique is the most fundamental factor that distinguishes dialogue from mere talk (Pinnegar and Hamilton, 2009). Dialogue in a self-study forms the basis for ideas and claims revealing the ontological stance of the researcher; and thus, advancing the examination of practice. (Pinnegar and Hamilton, 2009; Samaras and Freese, 2009). In this context, Samaras and Freese (2009, p.13) argue that through self-study, most teachers become aware of a disparity in what they believe and what they actually do in practice, and the self-study actually enables them to review their practices in their own setting. Coia and Taylor (2008) state that identities are shaped by those, whom we communicate with and establish the dialogues. Thus, to evolve and transform, to better understand the "self" and all related identities, one should engage in quality dialogues, critical dialogues, and be able to reflect on and reconstruct the past experience.

Dialogue takes place in an open environment where both individuals and their ideas/ opinions are respected and valued. For this reason, Watling, Hopkins, Harris and Beresford (1998) described the critical friend's role as balancing, questioning (inquiry) and supporting. Likewise, Pinnegar and Hamilton (2009, p.90) argue that "fruitful dialogue is always characterized by thoughtful responses that both interrogate and support the ideas expressed". Cardetti and Orgnero (2013) argue that recorded and documented dialogue in the process of the self-study is an effective tool for the professional development and transformation of teachers and teacher educators. For this reason, it is essential to distinguish the dialogue within the scope of self-study research from the meaningless talk or idealess conversations that take place in daily life. Determining a topic or agenda for discussion in advance might make a dialogue more effective since parties would have time to reflect, prepare questions and complete required readings. East, Fitzgerald and Heston (2009) state that the conversation should be systematized to separate it from simple, daily conversations. Likewise, Pinnegar and Hamilton (2009, p.90) argue that dialogue can be characterized as a conversation that includes "inquiry, critique, evidence, reflection and response".

An important point to consider for both parties is to prevent conversation to turn into a fight since as Haigh (2005) denotes, discussions often turn into verbal fights due to participants' resistance to change and endeavors to persuade each other that ultimately lead to moving away from rationality than rather providing constructive feedback and contributing to professional development. On the other hand, critical friendship in the self-study is based on mutual trust and respect, common understanding, and goal that aims to contribute and maintain the professional development of both researchers and their colleagues. Thus, critical friends in a research are ideal colleagues since they do not hesitate to criticize and express constructive opinions and different ideas honestly between and in conversations and discussion. Gibbs and Angelides (2008) attempting to clarify the notion of a critical friendship outline the similarities and differences between the critical friendship and other types of friendships in Table 2 below.

Gibbs and Angelides (2008, p.221) argue that a critical friend's responsibility is not restricted to feedback; and thus, they define the notion of critical friend as a participant whose "actual engagement for critique is situated within acceptance of the duties and obligation of 'perfect' friendship as moral agency, seeking a just and fair engagement". That is, since the critical friend is the friend; and thus, cannot be considered neither a companion nor an acquaintance, this relationship of the "humanist nature" should enjoy the shared understanding of the goals and the values in the context of the self-study process as well as being aware of essential features, implied responsibilities, and expectations behind the friendship during the process. Above all, the critical friend in the self-study is more than just a "tool", the critical friend is a friend at the first place who is truly engaged and strives for the success and the self-betterment of the close friend. In the following section, essential features and

certain qualities of a critical friend to be considered for the self-study research are presented in detail.

Table 2.

Critical Friends and Friendship. A Comparison. Gibbs and Angelides (2008, p.218).

	Based on Swaffield (2004)	Based on Aristotle, the Ethics (chapters 9 & 10) and the Rhetoric (chapter 2.4).
Roles	Facilitator, supporter, critic, Challenger.	Sharer, mentor, benefactor
Behaviour	Listening, questioning, providing feedback.	Praising, revealing characteristic in the friend, 'neither critical of failure nor flattering', balancing, mutual returns.
Knowledge and Experience	Experience and status.	Utility, pleasantness, humor, ability to satisfy the needs of theother in proportion their ability
Skills	Data analysis, interpretation, related to the specific objectives.	Restraint, able to mock and be mocked. Neither inquisitive norquarrelsome.
Qualities	Trustworthy, communicative, having shared values.	Shared values, ability to obtain the utility required, loyal duringthe period of the friendship
Form of relationship	Customer–provider, doctor–patient or process consultant	Mutual respect, a form of care and love

What "Kind" of a Critical Friend?

Since the self-study process is a complex and delicate matter, the selection of a critical friend to participate in the research is of great importance. Choosing a critical friend means deciding on the context of "coming to know" process along with the overall effect of the synergy and thus quality of the process in whole, not to mention the research climate. There are some basic points that should be taken into consideration for the selection of a critical friend since the friend to be chosen should have certain competencies and characteristics that can dramatically facilitate the research process. In this sense, the critical friend affects the research just like a catalyst, speeding up and triggering the transformation, ultimately contributing to the improvement of the practice and the researcher's professional development. As a matter of fact, just as specific substances need certain catalysts to stimulate the reaction, the researcher also needs a particular critical friend who would trigger and facilitate the self-study process. That is, critical friend possessing certain characteristics further the changes and facilitate the process of professional transformation.

Critique is fundamental in the process of quality development (Costa and Kallick,1993); and therefore, is an integral part of the self-study that drives the process towards the main goal of the study-the improvement of the practice. Thus, the critique taking place in dialogues between the researcher and the critical friend in the process of the self-study is provided for the analysis and interpretation of practice (Pinnegar and Hamilton, 2009). Therefore, the criticism provided here is a constructive criticism; and thus, should not be confused with or regarded as mere judgement or a (destructive) criticism, that is, defined as mere expressions of disapproval. Hence, the critical friend sharing the role of a harsh critique and a kind friend, is just like "the caring mother and the normative father" acting equally for the sake of evolving individual, i.e., in the interest of researcher's improvement and development. In this context, unlike peer assessment, the critical friend not only points out the weaknesses of the research, but also offers praises for the good practices and encourage effective strategies and ideas of the researcher. Thus, the criticism presented by the colleague is literally positive and enlightening (Gibbs and Angelides, 2008).

Since the word critique and related connotations are perceived negatively by people in general, responsibilities and expectations of a critical friend should be determined before the research. Moreover, as the process of critique is perceived merely as providing negative comments in oriental societies, for critique is directly associated with judgment, explicitly stating and clarifying the role of the critical friend could ease the possible tensions during the research process in general. Although Bloom "refers to critique as a part of evaluation, highest order of thinking" (Costa and Kallick, 1993, p.50), using the term "friend" that has a positive connotation in our culture with the term "criticism" that has a negative connotation, instinctively evokes a contradiction. That is, the concept of "critical friend" is somewhat oxymoron. The contradiction behind the connotation of the terms creates a confusion. That said, the term critique actually means "as defined by Immanuel Kant, describes a method for reflective judgement; a critical perspective on a matter as opposed to a dogmatic one" (Gibbs and Angelides, 2008, p.217). In this sense, the critique in self-study is a factor that transforms the process from static to dynamic state.

Committed critical friend supports and encourages the researcher, and as the name itself suggests, also provides provocative questions and comments alongside critical feedback, thus constantly challenging researcher's assumptions and beliefs, presenting essential critique for the researcher regarding the individual practices, assertions, and beliefs. Pinnegar and Hamilton (2009) in this context argue that engagement with critical friends whether they are skeptics or consultants help researcher think thoroughly; and thus, make the study more robust. Critical friend, also defined as a reliable colleague (Samaras, 2011), is a person asking provocative questions, providing data for the researcher for further analysis through different perspectives, and offering constructive critiques about the practices of the researcher as a friend (Costa and Kallick, 1993; La Boskey, 2004). In this sense, the critical friend represents a true friend or a "solid friend" who asks challenging questions, supports, and enables

the reframing of the understandings and practices and thus takes part in the professional development experience. Hence, the critical friend allocates time and effort to explore the understandings and rationales behind the practices alongside the researcher.

Since the "self" of the researcher is the focus in self-study research, the researcher is expected to be open to all kinds of criticism since the critical friend is a truly committed partner, a reliable consultant, and a loyal colleague. That is, since the researcher is the learner at the same time, considering Dewey's (1933) notion of the learner, the researcher as a leaner, in context of self-study "is an open-minded, wholehearted, and responsible individual" focused on self-improvement. The focused "self" studied in self-study is the researcher's pure "self", free of identities. Identity has a complex structure, and diverse identities shape the one's "self". In self-study, the researcher aims to reveal the identities that shape the "self", reveal the tacit knowledge, social and cultural factors affecting the self-understandings and the practices; and thus, strives to make the unconscious conscious and invisible visible (Alan, 2016; Pinnegar and Hamilton, 2009). Identities and beliefs have a great effect on one's "self" and one's practices.

In this regard, Pinnegar and Hamilton (2009) state that teachers conducting self-study research actually self-evaluate the ontology of their practice and by collecting and analyzing the data, researchers reveal their self and their practices in their actual context; and thus, discover the unconscious, obscured, and implicit knowledge that once was hidden behind and between school walls, classroom practices, and their environment. Moreover, by collecting and analyzing data, teachers are transforming and changing their pedagogical practices, developing brand-new personal and professional insights. To realize the "transformation" and thus be able to demonstrate these findings, the researcher needs to collaborate with a colleague, the critical friend, who would challenge the assumptions and beliefs and consequently serve as a trigger of the changes. The collaboration in the self-study, i.e., critical friendship begins with building trust.

Swaffield (2007) emphasizes that though critique might affect the friendship negatively, "trust" is a precondition, a fundamental feature of collaboration, effective relationship, and critical friendship in particular. Gibbs (2004) argues that trust of the critical friendship is based on the competence of a critical friend; and therefore, is considered as "contractual" transaction. That is, critical friendship rather falls more into a category of "critical acquaintance" (Gibbs and Angelides, 2008, p.222) since the critical "relationship is transactional" and friends for the study are selected considering "the maximum potential to create value". On the other hand, since "critical acquaintance" according to Gibbs and Angelides (2008) is so sensitive and in this kind of relationship "trust" is neither developed nor sustained, in the context of the self-study, using the particular term critical friend, suggesting more humane relationship, conveys and embodies the required impression of a balance between trust and critique, since the critical friendship relies on mutual trust and respect. Trusting others means being open

to learning and changes. Though trust make us vulnerable, trust teaches us to believe in ourselves and the others. In order to learn, reframe our understandings and practices, create a new knowledge, trust is the key that open the researcher new rooms full of opportunities and experiences, teaches us to embrace the critique and the differences; and thus, brings completely new "selves".

The critical friendship is a two-way process. The critical friend does not just criticize but values the researcher's ideas and understandings as a true friend. Just as we love those who support us and share similar opinions and ideas, it is imperative for the self-study researcher to value all those colleagues, who criticize. As a matter of fact, the word "friend" comes from the word "to love" and the word "critique" rooted in critical art, refers to careful judgement where care precedes the judgment. That is, critique in art is provided for improvement, for the ideas to be reflected once again, for the product and process to be reframed and find perfection, so the critique provided by critical friend in the self-study process should be regarded as having the same purpose.

Both parties engaged in self-study should share particular responsibilities. In this context, not only the researcher but also the critical friend learns and develops during the process. Besides being reliable, the critical friend is expected to be responsible. Responsibility here means being committed and engaged in the process together with the researcher. Since the research process takes time, the critical friend should be ready to allocate personal time in order to systematically observe the practices, participate in the discussions, attend interviews, and keep a diary whenever required.

Moreover, for the critical friendship to be effective, critical friend should have abilities to thoroughly observe, analyze, collect the information whenever necessary, paying attention to details; and thus, acting like a detective, prosecutor in the "trial" process, noticing all kinds of evidence, valuable data regarding the researcher's practices, consequently presenting these records for the analysis, and as a feedback. Accordingly, considering all these efforts, critical friend should be ready to spend a quality time and energy on the research process. At times, all these endeavors spent by the critical friend might result in misunderstanding. To avoid such a situation, Swaffield (2004) argues that the critical friendship should not be deemed as fake and fragile friendship but rather it should be sustained throughout the research process on the basis of mutual benefits.

To trust and be able to "put trust" in someone is easier said than done, so considering the challenge, it is expected that both parties are aware of the nature of "critical" connection; and thus, act carefully and avoid evaluating or judging the situations and experiences without providing any ground or evidence. In order to avoid baseless judgements, the critical friend is expected to be a very good listener, who provides counterarguments and alternative explanations, clarifies ideas in a dialogue; and thus,

helps the researcher to discover the implicit aspects of the practices. That is, since reframing of experience is achieved through the process of discovery, revealing of the tacit knowledge through collaboration and dialogue, listening is a basic requirement that enables the questioning (Pinnegar and Hamilton, 2009). So, in this process, every idea should be valued and listened carefully.

A critical friend in the self-study is expected to be honest. Honesty grants critical friend the authority to engage in constructive criticism, express and challenge the ideas discussed in a dialogue in an open manner. Honesty is built on the basis of trust and ensures that the knowledge or analyzed information has reached its target; and thus, the experiences and situations are interpreted correctly. Costa and Kallick (1993, p.50) argue that the critical friend should avoid value judgments and "offer the value judgments only upon request". That is, since some issues might be considered as sensitive and as a result appear as a source of tension, considering the value system of the particular culture, context of the study, and providing feedback accordingly would be a wise practice.

Swaffield (2007) emphasizes that critical friendship should not be perceived as merely providing positive feedback and support but the relation between the parties should be based on trust and honesty so that the parties are able to negotiate, confront, interrogate the challenging ideas, present alternative interpretations, provide arguments, and resolve all kinds of disagreements. Hence, once trust is established, constructive criticism is developed and encouraged throughout the research process. As a matter of fact, the critics are the best friends; and thus, the true friendship embodies critique and encouragement at the same time. True friends help each other to realize practical goals striving for a better life. Considering the premise, it is important to consider the critical friend who above all can be trusted and who will be committed and truly engaged before the research process initiates.

In fact, in self-study, the critical friend means more than a casual friend or acquaintance, but a true fellow and companion. That is, in real life context, a casual friend is the one who just looks at things, but the true version of a friend is the one who literally sees. In other words, true friend (critical friend) willingly and intentionally provides care and pays attention to every detail whereas the other would only glance. In this context, critical friendship in the self-study holds the true friendship identity. Moreover, there is a proverb in our culture related to true friendship that states friends "have to be cruel to be kind". Though the cruelty here, means the "bitter truth" or critique, the true friend indeed is an honest person who has a courage to be able to tell the truth, even if it hurts, since the true friend is aware that in the long run "the truth" (constructive critique) is good for the other party. This is what the concept of the critical friendship means in the self-study.

Block (1999, as cited in Swaffield, 2004) argues that a good critical friend should possess three sets of skills, namely, technical skills, consulting skills, and interpersonal skills. The technical skills refer to knowledge and competency regarding the particular issue, consulting skills refer to expertise in negotiation or reaching an agreement while the quality to adapt to a particular environment and provide interpersonal communication refer to interpersonal skills. On the other hand, Swaffield (2004) argues that the critical friend does not have to be an expert in the focus area since being a novice or non-expert assure to ask naïve questions. Naivete here, is somewhat the quality of innocence rather than deliberate ignorance. Thus, the naivete and innocence in this context is related to honesty and genuineness of an individual. In other words, as a true friend, the critical friend does not fake but acts honestly in the process of the friendship. However, a critical friend needs to have advanced counseling and interpersonal communication skills.

Apart from being honest, reliable and responsible, a critical friend needs to have the knowledge of the context of the research environment since qualitative data is used primarily in the self-study process. Moreover, it is important for critical friend to be informed with the research process (Costa and Kallick, 1993); and thus, researcher should clarify the basic expectations from the friendship process as well as introduce critical friend the methodology of self-study itself. That way, critical friendship can be beneficial for both parties since the process can be used reciprocatively. Moreover, to avoid instances of patronizing or condescending during the self-study, the questions related to power and the status should be neutralized and trust along with respect should be maintained ahead of the research so that the voice of the others in dialogues could be heard. Likewise, self-interest and individual benefit can jeopardize the reliability of the research. What is more, critical friend is ought to possess the competencies of interpersonal and group work skills including listening, observing, asking provocative questions, managing conflict, and team building, along with qualities such as respect, empathy, and genuineness (Swaffield, 2002). That is, though the critical friendship looks like a simple relationship, in reality it is a complicated process that requires consideration of specific skills and qualities.

Asking provocative questions in the process of self-study is another responsibility of the critical friend. Provocative questions are asked for clarity, disclosure and discovery of the tacit knowledge. Thus, curiosity of the critical friend and the ability to provide constructive questions in and between the dialogues reveal new ideas, understandings, and interpretations for the process and bring the clarity and intended reframing of the practices. The dialogue in the self-study process is therefore considered as a kind of scientific method for generating knowledge or revealing what is not seen in practices (Pinnegar and Hamilton, 2009). Thus, the dialogue conducted with the critical friend should slightly shake and pull the researcher out of the comfort zone, encouraging researcher to analyze, interpret and evaluate practices from a different perspective and through a different lens.

The critical friend in the self-study is the researcher's best friend who strives for the success of the study and is considered as the right-hand of the researcher. In this sense, as Schuck and Russell (2005) cite "When the right hand washes the left, the right hand comes clean too" (Nigerian proverb), so the friends in the self-study through opposition and resistance eventually reach the "clearness". That is, critical friend in the self-study is a fundamental "guide", a second hand who challenges the researcher for the sake of professional progress yet cares and respects him/her as a true friend.

The skills and attributes of critical friends described and exemplified above are shown in Figure 1 below.

As seen in Figure 1, the basic skills and attributes of critical friends include reliability and honesty, ability to provide constructive criticism, commitment and responsibility towards the study and colleague, awareness of the context, ability to observe and analyze, effective listening skills, ability to notice details, and asking thought-provoking questions. Considering the criteria, collaborative by characteristic, self-study should be carefully planned and one of most the important aspects is to choose qualified critical friends. Neglecting the abovementioned criteria, or strictly speaking, fakeness of the critical friend alongside the misleading dialogues, might yield undesired outcomes, and the process of "coming to know" itself might just be an imitation. Thus, to be true to "self", the researcher in the self-study should consider choosing true critical friend rather than "just" a friend since self-study is about ontological commitment, a "focus on what is real" and researcher's integrity (Pinnegar and Hamilton, 2009, p.5).

Figure 1. Basic attributes and skills of critical friends

Since critical friendship can be reciprocal, teachers and teacher candidates interested in self-study, can consider each other as a potential candidate. However, before becoming a true critical friend, individuals need to assess themselves, involve in self-criticism, and find answers to whether they possess the qualities and abilities of a quality critical friend, and if not, strive to develop these attributes and skills.

Discussion

Contrary to connotation and suggestion brought by specific designation, self-study is an interactive research methodology that involves collaboration. The collaboration in the self-study research is between researchers and critical friends. Although the term self-study is derived from the concept of individual, the research process takes place between the researcher and the critical friend, the researcher and the practices (Pinnegar and Hamilton, 2009). Thus, it is essential to include critical friends in the process in order to be able to review, reframe, and criticize existing practices (Loughran and Northfield, 1996).

In the self-study research, every idea, every experience can be subjected to discussion, questioning, and thus being accepted or rejected. By subjecting ideas and experiences to critique, researchers are able to reveal their tacit knowledge through the dialogue. The dialogue that takes place between the researcher and the critical friend, is the "process of coming to know" that strengthens, supports, transforms, and ultimately validates the findings of the study (Pinnegar and Hamilton, 2009).

In this study, the notion of "critical friend", considered as a fundamental element of the self-study research, has been reviewed and brought to further clarification. Although critical friendship might seem to be easy at first sight, in reality it is a versatile and complicated relationship and a friendship process. In this process, the critical friend supports and provides constructive feedback to the researcher in order for the research study to yield intended results. So, the critical friend has a power to determine the general flow of the research study. With the constructive feedback of the critical friend, the researcher can examine his/her practices from different perspectives and gain insights for change and transformation.

Considering the potential, the researcher planning to conduct self-study should consider the characteristics, attributes, and skills of the critical friend in advance since the process of critical friendship itself, dramatically facilitates the self-study process. The critical friend is a reliable friend at first, then a critic. Therefore, critical friendship is basically a form of relationship, the true friendship. The critical friend to be involved in the research process should be honest, reliable, and most importantly, trustworthy. In addition to this, the fact that the critical friend possesses the required skills, this can be the assurance of achieving the intended outcomes at the end of the self-study. That is, the abilities of the critical friend to listen carefully, notice important details, examine

and interpret data will further the study and produce the required effect, namely, the improvement of the practice.

Every kind of comment of a critical friend actually contributes to the development and transformation of the researcher. Based on this, being aware of the nature of critical friendship allows the researcher and the critical friend to be open-minded towards the critique and each other, furthering constructive, yet respectful critical comments. These comments, in turn facilitate and enable the change and transformation, which are the main purposes of the self-study research. Being aware of the responsibilities of the critical friend and the researcher helps and facilitates the research progress; and thus, somewhat guarantees the study to serve its purpose. One of the most important responsibilities of the critical friend is the commitment to the process. Being engaged and truly committed to the study means allocating time to systematically help the researcher by making observations, attending interviews and meetings, keeping a diary, and analyzing details.

The art of criticism is often ignored in education, but a good critic has a power to enhance and sustain the success in literature, drama, and dance. Including critical friends into the research studies in education field contributes to developing self-evaluation skills and open-minded outlook towards constructive feedback (Costa and Kallick, 1993). Determining a critical friend for a self-study research broadly means predetermining the success and outcomes of a study. Therefore, before embarking for a self-study journey, carefully consider your goals, design, and the crew. In order for your self-study research to reach its goals, that is, to gain new perspectives and to discover a new self, consider finding critical friends who have the characteristics mentioned above.

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Role Ambiguity of School Principals*

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Abstract: The present study aimed to find out the school principals' opinions working in public primary and secondary schools concerning their role ambiguity. It is significant for the purpose of this study to set forth the perspectives regarding experiencing the role ambiguity, consider the main factors which lay ground to role ambiguity and prevent situations that may adversely affect the functions of educational organizations in advance. This study employed a qualitative, phenomenological research design. As participants, there were 10 school principals determined with maximum variation sampling. The data, collected with the semi-structured interview, were analyzed and interpreted using the content analysis. The findings obtained in this study revealed two main themes as follows: "role ambiguity" and "influence framework". "Role ambiguity" was divided into two subthemes as "role line" and "elements of ambiguity". "Influence framework'; was divided into four subthemes as "organizational ambiguity", "pressure groups", "ambiguity mirror", and "solution paths". The findings obtained in this study showed that school principals experience role ambiguity. It was determined that the role ambiguity of the school principals of this sample resulted from organizational ambiguity and concluded that the school principals determined their roles as per the situation. Within the framework of the results of this study, the factors causing the role ambiguity of school principals should be removed.

Keywords: Ambiguity, role ambiguity, school principals.

Introduction

An essential part of the social structure, the schools are primary among the organizations that play a leading role in shaping society. Besides that, effective management of human and material resources are required to achieve the goals of schools, keeping and developing educational organizations in accordance with their objectives are also the tasks of the school management (Bursalıoğlu, 2013). To achieve the schools' goals, school principals should be able to use their authorities in accordance with the expectations of education policies, relevant laws and modern education approaches (Bakioğlu & Demiral, 2014). On the other hand, school principals who are responsible for school administration must have the knowledge and skills required to fulfill the duties and responsibilities assigned to them (Açıkalın & Özkan, 2015). To sustain the social order, people who have certain roles in society should perceive their roles accurately in accordance with their status and should fulfill the requirements of the roles expected from them.

A role is the legal and social rules expected to be fulfilled by someone (Güney, 2015). In other words, roles are the behaviors expected from the employed in an organization according to their status (Sabuncuoğlu, 2015). In a school's social system, the staff who works for the school also have roles due to the structural function of the school. In accordance with school principals' status, the roles and responsibilities expected from them are structured by social system patterns. As well as the school's formal requirements, there are also informal behavior requirements in compliance with the roles (Aypay, 2015). As the determinants of the social interaction quality, roles are also the essential driving force of the social structure. Hence, school principals should maintain their management duties in a qualified manner, have the awareness and sense of roles and reflect the necessary efforts to fulfill these roles. As formal organizations, schools have duties and responsibilities structured in accordance with bureaucratic expectations (Aypay, 2015). In one respect, people employed in formal organizations also constitute the informal organizational features with informal relationships (Eren, 2018). As responsible people for school management, school principals integrate their own role features with the responsibilities of other people in the system. In addition to the importance of the orientation of the organizational structure and the current situation put forward by the system with the responsibilities perceived by the school principals, adopting the administrative principles by school principals in compliance with the purposes of educational organizations is also important for the quality of school administration.

In compliance with the general purposes of Turkish National Education stated in the National Education Basic Law numbered 1739; the Turkish National Education and Training System is organized in a way to achieve the general objectives. Conducting and improving the education and training processes of the school are the

responsibilities of the school principal. The roles and responsibilities of school principals in the Turkish Education System have been determined in this way by the regulations published by the Ministry of National Education. The roles and responsibilities in the regulation of primary education institutions are as follows;

> 'ARTICLE 39 - (1) Pre-school education and primary education institutions are managed by the principal together with other employees in line with the provisions of the relevant legislation. The school principal, Manager ensures the fulfillment of the duties assigned by the ministry and provincial / district national education directorates and other duties specified in the job description as well as the school's students, all kinds of education and training, management, personnel, accrual, movable property, correspondence, educational and social activities, boarding, scholarship, mobile education, security, catering, maintenance, protection, cleaning services, order, duty, public relations '(Ministry of National Education, Pre-School Education and Primary Education Institutions Regulation, 2014).

The roles and responsibilities in the regulations of secondary education institutions are briefly as follows;

> 'ARTICLE 78- (1) The School Principal is the education and training leader primarily responsible for schoools management and representation and shall be responsible for the effective and efficient use of all resources to achieve the goals of the school in accordance with the Constitution, law, regulation, regulation, directive, circular and other relevant legislation provisions in accordance with the general objectives and basic principles of Turkish National Education abiding by the team spirit. The principal manages the school in cooperation with the boards, commissions and teams within its body '(Ministry of National Education Regulation on Secondary Education Institutions, 2013).

Expectations define the role and the role expectations are revealed by the authorities and responsibilities brought by the requirements of the role (Bursalıoğlu, 2013). Social expectations are exposed to the change of society in compliance with the characteristics of the time. There may be differences between the roles expected from school principals and the roles they experience. As stated in the relevant regulations, the ambiguities that prevent the fulfillment of the roles defined by these expectations can cause role ambiguity. Although the roles and responsibilities of school principals are officially stated by regulations, they may experience role ambiguities due to roles developed outside of the framework of their duties.

It is thought that the role ambiguities as experienced by school principals in perceiving and conducting their roles may cause some organizational and vocational problems. Role ambiguity can be defined as the lack of clear authority and responsibility boundaries for the job of the person, the uncertainty of behavior expected from this person in relation to his/her job, or the lack of perceiving of the person of his/her purpose in relation to his/her job, and beyond this, the inability to understand the organizational purpose and meaning of the job (Baltaş & Baltaş, 2000; Jones, 1993; Stordeur et al., 2001). In addition, role ambiguity may arise from that the individual does not have the necessary information to achieve the expected performance within the scope of the duties assigned to him in the institution where he/she works (Ceylan & Ulutürk, 2006). In one respect, employees of the organization may experience role

ambiguity when they are unaware of their work and cannot receive feedback. Multiple dimensions of role ambiguity, based on the perspective of the tasks are stated as target, expectation and responsibility ambiguity, process ambiguity, priority ambiguity and behavior ambiguity (Bauer & Simmons, 2000). People who experience role ambiguity may undergo some experiences, such as having difficulties in the work environment, dissatisfaction with their work, inefficient workforce, feeling worthless and being stressed. In addition, the presence of role ambiguity in organizations, in parallel with all other reflections, also brings role conflict. In research that studies the relationship between role ambiguity, role conflict and job satisfaction and performance, the findings showed that there was a positive relationship between role ambiguity and role conflict. In fact, job satisfaction is adversely affected in this model, in which role ambiguity is included with role conflict (Ceylan & Ulutürk, 2006). Role conflict refers to the situation that arises in the presence of roles incompatible with the roles of the organization's employees, and these roles conflict or expected more than the current situation, and the resources required to perform these roles are insufficient (Tolay Sabuncuoğlu, 2008).

It is necessary to define the role in organizations and perceive the role accurately for properly maintaining the management task. Hence, in this situation, it may be required to raise questions to find out what are the most important definitions and interpretations to sustain the school administration in a qualified manner. It is considered important in terms of knowing the results by considering the factors that cause and may cause role ambiguity for school principals who undertake management duties in educational organizations. It is also necessary to know the current situation of school principals regarding the role ambiguities to prevent personal and vocational problems that may adversely affect the management of educational organizations.

In this research, we aimed to find out the current situation concerning the role ambiguity of the school principals working in the public primary and secondary education levels and offer solutions for role ambiguity. In this context, answers to the following questions were sought:

1. What are the general views of school principals about the concept of "role ambiguity"?

2. What are the views of the school principals about whether they experience role ambiguity or not, what are their opinions about the problems and solutions in case they do?

Method

Research Designe

The reason to determine the qualitative research method as an appropriate method for this research is considering the examination of the individual experience and perceptions of role ambiguity of school principals, who were the subject of the research significant by determining the conceptual framework and scope of this research. The structuring of the inquiry process in qualitative terms has been handled with an interpretative (social) paradigm. The reason to prefer phenomenology research design, which focuses on human experiences of social reality in this research is the assumption that is presenting and in-depth analyzing the different data and the facts which are related to the research subject, such as orientation, experience, perception, coding, situation or events specific to the phenomenon, could be achieved by different perspectives.

In one respect, phenomenology is the description of experiences as they are reflected (Merleau-Ponty, 2016). This study aimed to provide the school principals with a possibility to present a detailed explanation about the role ambiguity and to reflect participants' perceptions on the phenomenon by collecting data using face-to-face interviews with school principals.

Study Group

In the selection of phenomenological research samples, those participating in the research should have experience in the context of the subject of the research (Creswell, 2017). In qualitative research, samples as the focus of phenomenological design are the individuals who have been experiencing and those who continue the experiencing processes (Baş & Akturan, 2017). In this study, maximum diversity sampling, one of the purposeful sampling methods, was used. The main purpose of using maximum diversity sampling is to reveal common facts in situations that vary among the obtained data and to express the different dimensions of the current problem according to its variety (Yıldırım & Şimşek, 2016). It is essential that the participant school principals' expressions are satisfied with maximum diversity sampling in accordance with the research phenomenon and aims. As the research sample, ten school principals from public primary and secondary education institutions were included. School principals group which satisfy maximum diversity voluntarily participated in this study. To present the factors regarding school principals in this study, the relevant details were shown in the form of code as follows.

Table 1.

Demography of the School Principals Who Constituted the Research Sample

School Principal	Age	Sex	Major	School Type	Education Status
SP1	47	Man	Social Studies	Anatolian High School	Master Degree in Education Administration
SP2	43	Man	Computer Technologies	Secondary School	Master Degree in Education Administration
SP3	53	Man	Physical Education	Special Education High School	Undergraduate Degree
SP4	50	Woman	Catering	Anatolian Vocational and Technical High School	Master Degree in Education Administration
SP5	39	Man	Class Teacher	Primary School	Master Degree in Education Administration
SP6	40	Woman	Class Teacher	Primary School	Master Degree in Education Administration
SP7	38	Woman	English Teacher	Secondary School	Undergraduate Degree
SP8	54	Man	Class Teacher	Primary School	Undergraduate Degree
SP9	45	Woman	Turkish Teacher	Secondary School	Undergraduate Degree

(SP1, W2, M2) SP1: The number of school principals, W2: Woman M2: Man

Data Collection

To reveal and interpret the participants' experiences regarding the research phenomenon in multiple ways, qualified face-to-face interviews are required (Ersoy, 2017). The purpose of the interview is to examine the research participant's inner world and understand his/her perspective (Patton, 1987, cite in Yıldırım & Şimşek, 2016). In this research, semi-structured interviews were held with the participants to examine the essence related to the experiences. Conducting the research in a phenomenological design provides an opportunity to obtain detailed data for the preparation of questions that allow the case to be revealed (Ersoy, 2017). Therefore, during the research preparation process, open-ended questions were prepared and developed through pilot practices in accordance with the flexible principles of qualitative research. Although the research questions were two basic questions, there were eighteen questions, including the sub-questions.

Validity and Reliability

Validity and reliability elements of the research are expressed as internal validity or credibility, reliability or consistency, external validity or transferability. External audit, long-term interaction, peer review and expert opinion strategies were implemented to ensure internal validity or credibility in the research (Cresswell, 2018). To ensure an in-depth examination of the views of school principals on role ambiguity, detailed examinations were conducted through interviews and additional notes were taken throughout the interview. The purpose of the long-term interaction strategy, which is another strategy used to ensure internal validity or credibility, is to increase the credibility of the collected data by maintaining the interaction with the data sources obtained as a result of the research (Yıldırım & Şimşek, 2016). To ensure the diversity of the place of duty, the participants were interviewed at their schools and the places were introduced and distinguished more clearly. The participants were prepared to feel ready and comfortable before the research by increasing the time spent with the participants before the interview through interactions, such as telephone calls, correspondence and appointments. Before determining the face-to-face interview questions of this researchthrough pre-interviews, the feedback was considered given by the educators who had experience within the context of the research phenomenon or participated in different research and draft questions were prepared as a result of the literature review. To determine the face to face interview questions, the opinions of experts in education administration and human resources management were consulted. Turkish proofreading of the interview questions was conducted and the final form of the interview questions was determined by an educator specialized in the Turkish Language. In the research, "detailed description and purposeful sampling" (Erlandson et al., 1993, Akt; Yıldırım & Şimşek, 2016) methods were used to provide external validity or transferability. An in-depth examination of all the additional notes and documents taken by the researcher in addition to the participants' opinions supported the detailed description. By directly reflecting the participants' expressions on all data obtained as a result of face-to-face interviews, the results were presented in detail. Different sample data were also included. In the consistency analysis of this research, whether all stages in the research process were appropriate and consistent according to qualitative research principles was repeatedly examined.

Data Analysis

Content analysis was used for the analysis of the data. Content analysis is referred to obtaining systematic and unbiased results from certain participants by scanning interview texts (Stone et al., 1966, 213, cited in Koçak & Arun, 2006). The purpose of content analysis is to reach explicable concepts and relationships with the data obtained as a result of the research (Yıldırım & Şimşek, 2016, 242). The process followed in data analysis is defined as collecting data, finding themes, organizing codes and themes, defining and interpreting findings. The purpose and conceptual framework of the research were questioned perpetually as being the core of

questioning the research questions made on the data. The code list defined on the data was examined by an independent expert from the research, and the codings were finalized with the necessary feedback. In the process of finding the themes of this research, the code list on the data was examined by reviewing the literature with the inductive method, common aspects were brought together, and themes that form meaningful wholes were created from the named codes. The data analysis obtained through face-to-face interviews was re-evaluated, and the relationships on themes were revealed. The data organized under the research questions, along with two main themes, sub-themes and categories, are given in detail under the heading of the findings of this research.

Results

According to the content analysis results performed in line with the research data in this study, two main themes were reached as "role ambiguity" and "influence framework". The themes were presented with respect to the order of research questions as follows Figure 1.
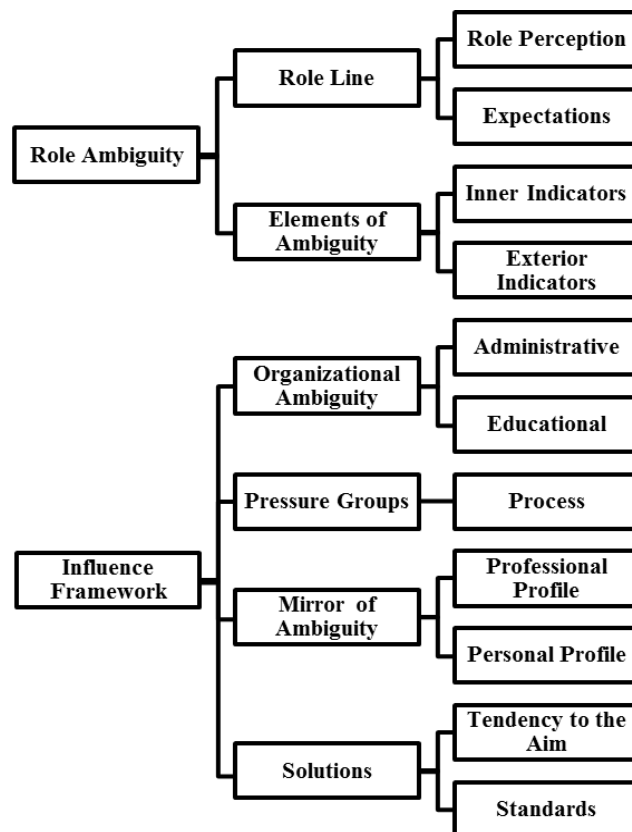

Figure 1. The themes of the research, subthemes and categories

Theme 1: Role Ambiguity

In the theme of role ambiguity, there are explanatory opinions and descriptions of school principals' interpretations of role ambiguity which were reflective of the participants' perceptions. The theme of role ambiguity consisted of the sub-themes as the role line and elements of ambiguity. Role line sub-theme was explained by the role perception and expectations categories. The figure below reflects the views on the role perception category, which is under the role line sub-theme and the role ambiguity theme;
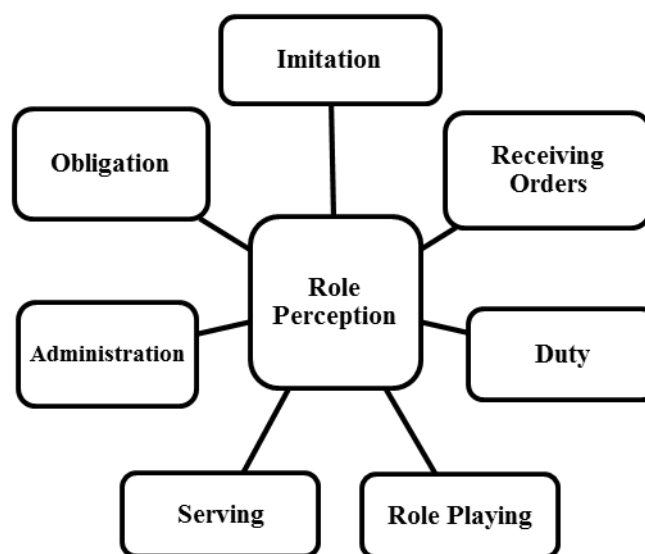

Figure 2. Role perception theme, role perception category codes of the role line sub-theme

The codes of role perception category of the role line, a sub-theme of the role ambiguity theme were determined as imitation, obligation, receiving orders, duty, administration, serving, role-playing and duty. Examples of participant school principals' opinions are as follows;

(SP[3], M): In addition to roles, such as managing the school, managing staff and guiding students and parents, we can even have momentary political roles. To summarize, we are the personnel who work in schools to get that desired thing done right. We just pretend it, we just pretend to obey their rules, but we just play and we do what we know.

(SP[5], M): It is all of the behaviors expected from us and that we have to play. Sometimes, it is what we have to do because of the tasks assigned to us. It is the play of roles tailored by superiors.

(SP[6], W): It is the imitation of the desired role by person. It is to serve the institution to which she is affiliated.

Figure 3 below reflects the views gathered on the expectations category of the role line sub-theme of the role ambiguity theme;
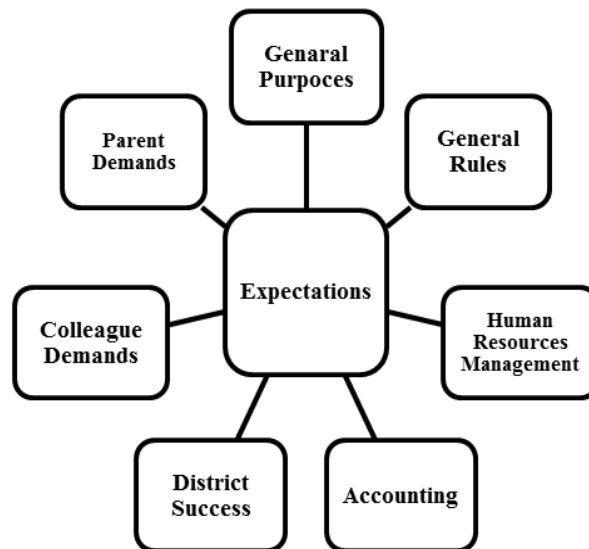

Figure 3. Role perception theme, expectations category of the role line sub-theme and codes

The expectations category and codes of the role line sub-theme of role ambiguity theme were determined as general rules, human resources management, accounting, district success, colleague demands, parent demands and practicality. Sample views of participating school principals are as follows;

> (SP[8], M): It is expected from us to manage money, people management is also expected, human relations are expected to be good, the school should be well organized. I am expected to be successful in many commissions in the district; there are expectations from any side.

> (SP[9], W): My role is that I will stay at school and realize the general goals of national education. I will prepare my students for the future.

> (SP[10], W): This is the way that I can explain it. To summarize it, the first thing is what my colleagues expect, what parents expect, and what the minister of national education expects. What my colleagues expect is more comfortable and ergonomic classes and fewer students in classrooms. Technologically better-equipped classrooms, concerning cleanliness. Besides that, I am also expected to solve my colleagues' personal problems if they may have.

The elements of ambiguity sub-theme are explained in internal indicators and external indicators categories. The figure below reflects the participating school principals' views, gathered on the internal indicators and external indicators categories of the the subtheme of uncertainty elements of theme of role ambiguity.
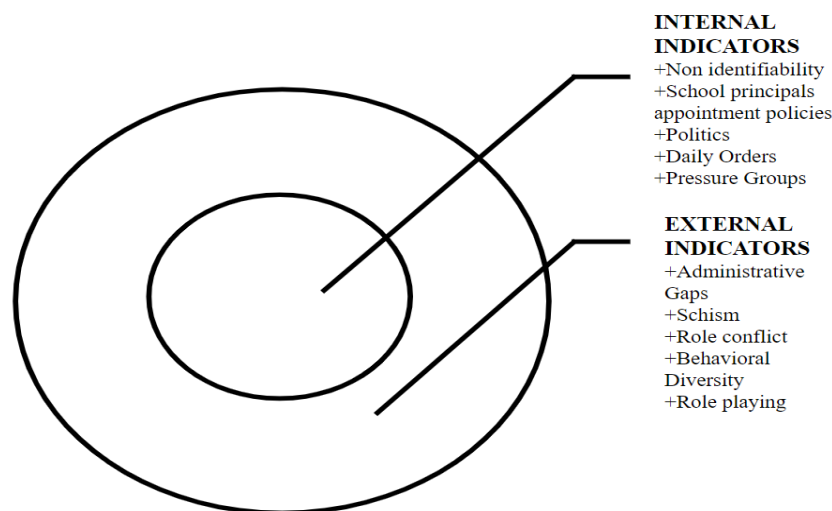
INTERNAL INDICATORS
+Non identifiability
+School principals appointment policies
+Politics
+Daily Orders
+Pressure Groups

EXTERNAL INDICATORS
+Administrative Gaps
+Schism
+Role conflict
+Behavioral Diversity
+Role playing

Figure 4. The internal indicators and external indicators category and codes of the role line sub-theme of role perception theme

The internal indicators category and codes of the elements of ambiguity sub-theme of role ambiguity theme were determined as non-identifiability, school principal appointment policies, politics, daily orders and pressure groups. Sample views of participating school principals are as follows;

> (SP[1], M): Not being able to define what you are doing in your job. As an example, it is one of the biggest problems of school principals. Today, I am a teacher; tomorrow, I will be the administrator. Today, I am the administrator; tomorrow, I will be a teacher. In this dilemma, am I a teacher or an administrator? To say it, every principal is a teacher, but let's verify the opposite then. What will you do in case every teacher means that they are also principals.

> (SP[2], M): There are unwritten definitions of school principals. We happen to have to do a lot of tasks that are not clearly stated. A thief sneaks into the school in the middle of the night. You have to be there. An unfavourable situation happens, you have to take care of it, and there is no defined time and no limit for it. There are assistant managers appointed to work with you but take a company into consideration, even while managing the company, the accounting part is run by the expert. In our situation, only those who have experience in teaching try to do it by learning in time. They are not experts; we try to make them experts in time. This really makes us tired and instead of dealing with education at school, you cannot find time to take care of education work instead of dealing with administrators.

> (SP[7], W): Unions are on us, but there are also policies produced by the government. The current situation is not an education policy; it's a government's policy. There has never been a state policy. This creates an ambiguity. The new governments that take office take different decisions over and over again and leave us with different situations. Even the same government can change the same regulation three times in a year.

The external indicators category and codes of the elements of ambiguity sub-theme of the role ambiguity theme were determined as administrative gaps, schism, role conflict,

behavioral diversity and role playing. Sample views of participating school principals are as follows;

(OM[4], W): *In case he/she who could not internalize the role or exert dominance well, he/she will definitely reflect it with his/her behaviors. There will be positive or negative repercussions. I think negative reflections will be more than positive ones. Teachers can exploit this ambiguity towards principals and use this gap.*

(OM[3], M): *By forming groups through the unions, it gets more concrete. So it feels like something that doesn't go from top to lower levels. That's why there are conflicts about roles sometimes.*

(OM[8], M): *There is a schism in schools as you know. Those are again the groups formed by unions or people who have a command of the regulations. I think foundations and associations might be very effective. Also, I think media and social media, communication tools are very effective.*

(OM[6], W): *There happens chaos, a mess; as you can see our phones don't go silent. Where there is chaos, mess, there can't be discipline and order. The roles need to be determined thoroughly. Everyone has expectations from the school principal. People never mention how they can help. They care about how they can benefit from schools and school principals. They are being pragmatic when they approach us. I perform in a superhuman way. I experience conflicts between my administrative roles and my personal roles. I try to balance all the roles.*

Tema 2: Influence Framework

In the influence framework theme, there were expressions that explained the interpretations and the reflective definitions of the participant school principals about the influence framework. The influence framework theme consisted of organizational ambiguity, pressure groups, ambiguity mirror and solutions. Organizational ambiguity subtheme was explained by managerial and educational categories. Figure 5 below reflects the views of the participating school principals gathered on the managerial category of the organizational uncertainty subtheme of the impact influence framework;
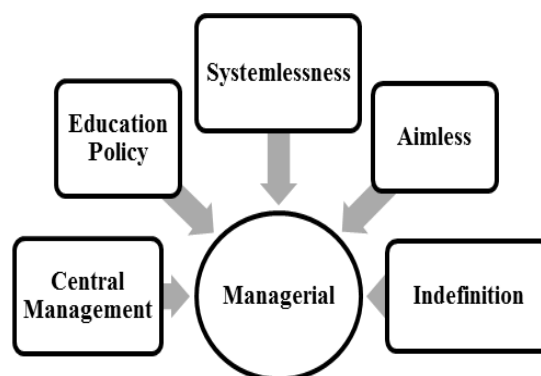

Figure 5. The managerial category and codes of the organizational ambiguity sub-theme of the influence framework theme

The managerial category and codes of the organizational ambiguity sub-theme of the influence framework theme were determined as systemlessness, educational policy, aimlessness, indefinition, and central government. Sample views of participating school principals are as follows;

(SP[3], M): Why are these roles dictated to us by seniors? The roles of a middle school principal and my situation in a mentally disabled school are not the same. My roles should not be the same. Even while we are teaching to students, we design an individual education program for each student. The roles of all school principals should be specific and individual. Everyone's school is different; their neighborhood is different; their economic situation is different. A project is coming out from above; they say you will buy a tent, something up-to-date. He doesn't ask if you have money. There is a festival; it will be held. It costs 1000 TL, he doesn't ask if you have money. But it will be done.

(SP[6], W): Out of the blue, an urgent article is sent to us and says it needs to be answered in a short time, or for example, when the superiors are making a decision, they just give orders without creating any infrastructure. It is said that you will do this. Are the teachers available? These decisions are made before the conditions are met, and we are asked to implement that decision without an infrastructure. This, of course, causes us to fall into administrative ambiguity.

(SP[5], M): You can check it; we don't have a job description. It is not clear that what we do and what we don't do. It is not clear that what we are responsible for and what we are not. Now if a child falls down the stairs, I will go to court. If the toilet is dirty in schools, I will be dealing with CIMER again. But since there is no job description, because there are no such clear lines, so I have to answer you by mumbling.

Figure 6 below reflects the views of the participating school principals gathered on the educational category of the organizational ambiguity sub-theme of the influence framework theme;
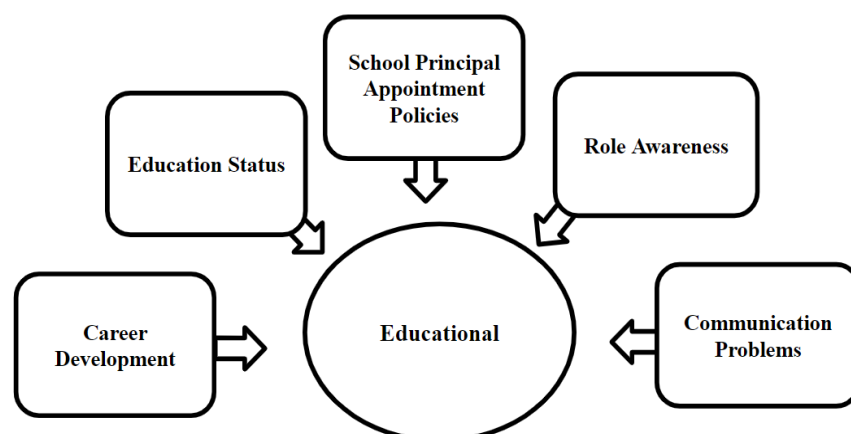

Figure 6. The educational category and codes of the organizational ambiguity sub-theme of the influence framework

The educational category and codes of the organizational ambiguity sub-theme of the influence framework were determined as the school principal appointment policies, the educational status, career development, role awareness and communication problems. Sample views of participating school principals are as follows;

> *(SP[4], W): We learn the job while doing it. None of us graduated from the principal school. In the later years of my profession, I got a master's degree in education management and supervision. I wish I had done this at the beginning of my management career. My management experience could be different. There was a difference between the two. I worked without knowing the job.*

> *(SP[8], M): You have to work with a little margin of error. There should be no margin of error. You have to be strong in every move and you cannot act after your heart. It affects my role. I cannot stand strong behind what I say. If I stand behind them, they will use those legal rights.*

> *(SP[9], W): As you may know, we are all assigned to these duties not permanently. In fact, teachers become principals or vice principals for four years. Actually, none of their positions are permanent, we all get appointed back to be a teacher with a sheet of A4 paper. That's why I have a role conflict.*

The pressure groups sub-theme is explained by the process category. Figure 7 below reflects the views of the participating school principals gathered on the process category of the pressure groups sub-theme of the influence framework;

Central Management

Unions

Complaint Lines
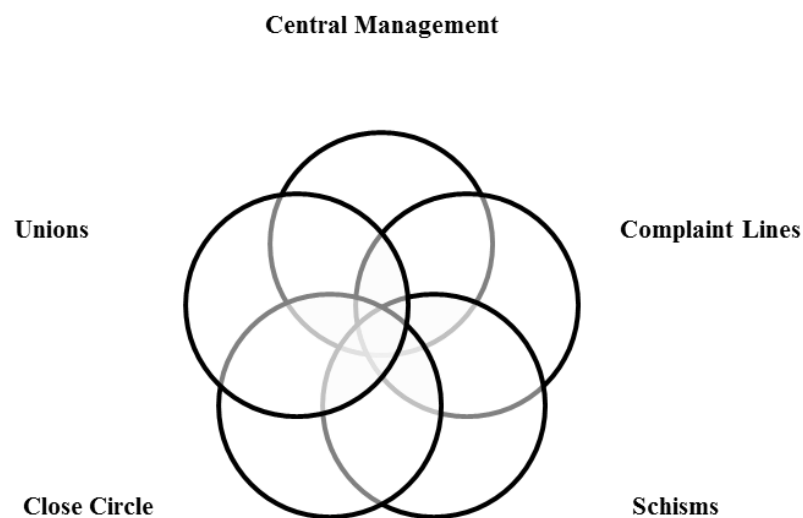
Close Circle

Schisms

Figure 7. The process category and codes of the pressure groups sub-theme of the influence framework

The process category and codes of the pressure groups sub-theme of the influence framework were determined as central administration, complaint lines, schism, close circle and unions. Sample views of participating school principals are as follows;

(SP4, W): Supervisors, supreme authorities are important for us to take this role and play, and their influence is much more to play this role. This is because of our superiors' expectations from us are in this direction. It has its drawbacks. What you want to do can not reach its purpose. It can't be effective and efficient. This situation can cause insecurity and a management vacuum. There may be a lack of respect for you. There may be deficiencies in obedience.

(SP6, W): You need to have a strong solid team while managing. Problems with superiors are not unsolvable; for example, let's assume that you receive an article and there is always an ambiguity when you want to do something. You have to write on them. We are in a time shortage. These give us role ambiguity.

(SP2, M): There are complaint lines, for example, in schools. Parent satisfaction is important, but this system is very wrong. Of course, the family is a stakeholder here. But, this is something different, but it was not pleasant to bring the parent ahead of the student and the school. So what did we do? We spoiled the climate of the schools, and we regressed education.

(SP5, M): The pressure groups are not in sight, but they want things from us to be done. I am not saying that I am a very decent man for myself. For example, pressure groups want us to do something. Foundations or associations are doing some work within themselves. For example, my teachers come and ask me, "What would happen if we don't attend to those works?". But the friends at the top (district -city officials) say; he says "we expect at least 160 attandance". Whether the situation is appropriate or not. Normally we have a conflict of roles. Pressure groups make us feel ambiguous.

(SP3, M): For example, our roles are changing as the political situation of the unions' changes. It causes ambiguity, it can even change according to the current situation.

The figure below reflects the views of the participating school principals gathered on the professional and personal categories of the ambiguity mirror sub-theme of the influence framework theme;

Professional Profile
- Role Conflict
- Lack of Authority
- Education Status
- Aimlessness
- Inconsistency
- Injustice
- Systemlessness
- Role Playing
- Alienation to work

Personal Profile
- Ineffectiveness
- Inefficiency
- Inconfidency
- Psychological Problems
- Physiological Problems
- Motivation
- Self-Confidence
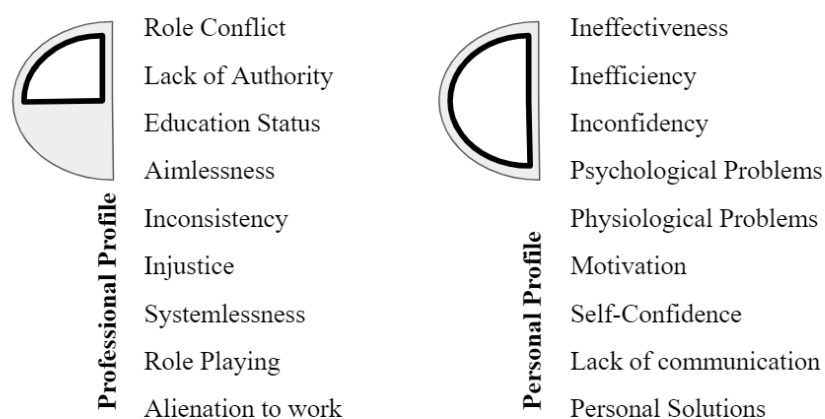- Lack of communication
- Personal Solutions

Figure 8. The professional profile categories and codes of the ambiguity mirror sub-theme of the influence framework theme

The professional profile categories and codes of the ambiguity mirror sub-theme of the influence framework theme were determined as role conflict, lack of authority,

educational status, aimlessness, inconsistency, injustice, systemlessness, role playing and alienation to work. Sample views of participating school principals are as follows;

(SP[4], W): We do not have any authority. We have responsibilities and risks. We are walking on the sharp side of the sword. There is no situation we can guarantee. We are responsible for any negativity at school. If your student, administrator, staff or teacher makes a mistake, you are the person to be held accountable. Therefore, we are in a really difficult time. We have limitations in our authorities, and we have a lack of effectiveness […] I wouldn't say role restriction here, but I believe that my effectiveness and competence are not enough.

(SP[6], W): We do not have authority; we have obligations and responsibilities. For example, only project schools can choose teachers, but why can't we choose them. For example, I have many teachers that I don't want to work with. Because our future will be shaped by our children.

(SP[10], M): The decisions are instantaneous. You have to apply them because the decisions taken are instantaneous, and directives come to you every hour. So, things are coming from the top. We cannot take one more step ahead as long as the logic of "pretending" is the basis of our education. We cannot get into the essence of the matter; we are concerned with its external structure […] When there is ambiguity at the top, the ambiguity goes down.

(SP[1], M): This is the reason for our biggest criticism of today's system. The principal does not take the initiative; the principal does not lead; the principal does not lead. In other words, He/she does not improve the situation. He just waits as the days are passing by. At the point of giving direction and activating the stable situation, if you do not act and only manage the current situation, you will be an "administrator". You remain the administrator and you do not deserve the role.

(SP[8], M): Not being able to define what you do in the job. Let me give an example; it is one of the biggest problems of school principals. Today, I am a teacher; tomorrow, I am the administrator. Today, I am the administrator, and tomorrow, I am a teacher. In this dilemma. It is useful to say this. It is the absence of a systematic solution approach. So today I am a teacher, tomorrow I am the administrator. Thus, today here and tomorrow, there is the ambiguity of the situation.

The personal categories and codes of the ambiguity mirror sub-theme of the influence framework theme were determined as ineffectiveness, inefficiency, inconfidency, psychological problems, physiological problems, motivation, self-confidence, lack of communication and personal solutions. Sample views of participating school principals are as follows;

(SP[2], M): We are trying to fulfill all our responsibilities. This can make us sad, tired; in other words, we experience discomfort […] The teachers change, the schools change, the education system changes. When everything changes, you also change with them […] The roles you have to follow the change. With what you can do and what you cannot do.

(SP[5], M): Normally, there are also things that show that you are affiliated with an organization. You feel that you are loved; you feel accepted. You think that "I am very precious here," a job appears and they call you. If you have a question, they will listen to you first. You have hope that it can be resolved. So you have a discussion with someone and why would they go and complain about you unfairly. Unfairly, but you feel that they will try to do something about you behind your back. I'm not standing behind you if you go along well with me and when we do something against the law; You know that it will be solved because you go along well, not because of a problem that normally needs to be solved. If you can't feel this, you can't do that role properly; you can't trust it.

(SP⁷, W): We are not motivated enough, my colleagues as well. My only concern is the children. My aim is to raise good citizens and good people. Let them learn the roles of being a good citizen. Let's get a society in which there are no conflicts between strata. So that's my goal. Let them have humanist values, learn to live together.

(SP⁹, W): There are problems at the definition point. Your roles are clearly defined in a transparent way. In other words, each principal assigns a role for himself […] The same things about the principal, there is a given title of being an administrator in a vicious circle that has not been defined and whose boundaries are not clearly defined, with the concern that this is mostly temporary. It is one of the reasons that lead me to the most uncertainty in taking the initiative.

(SP³, M): If you experience ambiguity, if you live in a conflict. The individuals you raise will also become indeterminate individuals. You reflect the chaos in your own situation as you experience. It's like I reflect right now. For example, very important phones have been coming since the morning, sometimes I forget the issue, I get confused, I wonder what the problem was[…] Not being self-confident is the reason to demotivate the other person. Actually, every ambiguity of us gives a distrust to our teachers. The teacher wants a principal standing firmly behind him. A principal who fulfils his authority, who fits his role, who guides him/her, who can stand behind him/her.

The views of the participant school principals gathered on the orientation to the target and standards categories of the solution paths sub-theme of the influence framework theme were explained. The figure below reflects the views of the participating school principals gathered on the goal orientation and standards categories of the solution paths sub-theme of the influence framework theme;
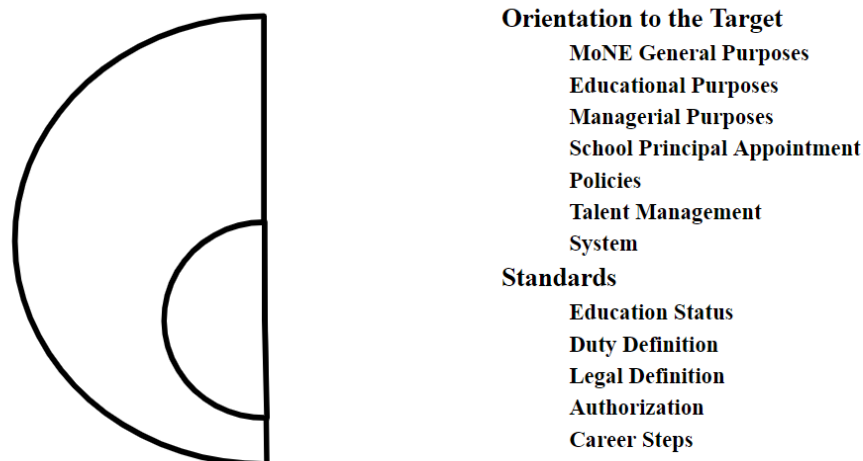

Orientation to the Target
  MoNE General Purposes
  Educational Purposes
  Managerial Purposes
  School Principal Appointment
  Policies
  Talent Management
  System
Standards
  Education Status
  Duty Definition
  Legal Definition
  Authorization
  Career Steps

Figure 9. The orientation to the target and standards categories of the solution paths sub-theme of the influence framework theme

The orientation to the target category and codes of the solution paths sub-theme of the influence framework theme were determined as the general goals, educational goals, managerial goals, school principal appointment policies, talent management and system. Sample views of participating school principals are as follows;

(SP[3], M): School principals are actually something concrete; we are educators and we should be given jobs related to education. Let them take staff jobs from us, accounting jobs, etc. Let's do our own job, our own work. I think it would be more beneficial to do our work on education […] I try to answer ten or fifteen papers coming from the system nearly every day. Something new comes out in the school every day. We do nothing but perform for unions [….] The basic law of education is what should be expected from us, that is our role. As I said, we never continue on this line, and we should not go beyond this line.

(SP[10], M): There were pressure groups in the past too. We had not been rewarded when we had done what the pressure groups had said, but now they are rewarded. Maybe, it was increasing his own inner motivation, but now we are given material and spiritual reward for doing the work of a pressure group. If you meet the goals of a popular foundation, maybe, you can move to a seaside school.

(SP[4], W): There are all goals in terms of students, teachers and administration. For example, my goal for students is to train good people here. We aim to raise a good Turkish citizen who does not lie, knows his responsibilities. What is the school for anyway? Basically, it should be like this.

(SP[8], M): The lack of real permanent positions in the school management causes us to play every role given to us […]. For example, we could choose our vice principals, but we can't choose them right now. School management is teamwork. I want to choose my own team.

(SP7, W): Here, as an example, there are project schools. They can choose their teachers. They can ask for changes at least every four years, or if it is a school outside of the province, it may be possible to bring a teacher from a different location. We, let alone finding permanent teachers, may have difficulties even when finding contractual teachers. The team is important.

The standards categories and codes of the solution paths sub-theme of the influence framework theme were determined as education status, duty definition, legal definition, authorization and career steps. Sample views of participating school principals are as follows;

(SP[1], M): There should be a law of professioN. Just as we want a law of profession for teachers, administrators should also be defined. The principal will manage the leadership direction, the direction of using authority. So these should be tailored to a title. It should not remain as a temporary title so that the person there makes sacrifices. There has to be a level. There should be career steps. This is perhaps one of the biggest problems of our education system. When you leave it stable, we can see that even the teacher is not doing his best. He can't do his part anyway, he says, I was born as a teacher, as a teacher, I will die. So he/she is not aware of his/her role. Because he/she is not aware of his/her role, he loses his status over time in his/her own eyes, in the eyes of society. He/she loses his/her status in the eyes of society. He/she cannot get the value he/she deserves from society. Because the stable role turns into an unconscious role.

(SP[10], M): It is seen as one of the career steps, but there is not a certain point in our laws for principal or vice principal. This should be seriously defined and principal should be a career step. Must have a title.

(SP[4], W): First of all, responsibilities and obligations should be very well defined; it should be clear at the beginning of your job. If you know your responsibilities well, you will act accordingly. You play your role according to that, act accordingly and reflect it to the other parties accordingly. Job descriptions need to be clear. It must be legally certain. It must be reported to us within the framework of the regulations. Moreover, there should be orientation and practice at the beginning of the job[…] I did this job without knowing it. I should be transparent in educational

administration and supervision; I should be empathetic with teachers; I should lead culturally, I should be democratic. I learned so much. I have always learned these under educational administration and supervision. In the past, for example, I was a manager with my door closed, but I learned that my door should be open for the management and supervision of education. As the school principal, I reflected everything to my vice principals.

(SP[3], M): We go beyond the role assigned to us […] We are unauthorized authorities. We have no authority. We do not have the authority to supervise the teacher; we do not have the authority to punish the student, we do not have the authority to award the teacher, we are not authorized to give a reward to the students. We must have authority. I think my authority is affecting my role. Adhering to the educational program and bringing children to a better level of awareness are entirely the result of personal efforts.

Conclusion and Discussions

In this study, which aims to reveal the current situation and come up with solution suggestions by examining the experiences of school principals regarding role ambiguity, participating school principals expressed the phenomenon of role ambiguity in the context of role perception and expectations categories gathered in the role line sub-theme. School principals have an understanding of their roles as imitating the role they have, the duties they fulfill out of necessity, the orders they receive, administrations, serving and role playing. On the other hand, they justified that these projections were caused by various tasks expected of them. This may be an indication that school principals experience role conflict as a result of role ambiguity. In fact, that the person taking more than one position within the framework of the role increases the possibility of role ambiguity and role conflict (Sabuncuoğlu 2008; Rizzo et al., 1970). School principals state that as well as the general objectives of National Education and general rules; there are also expectations from them in terms of diversity of roles, such as human resources management, accounting affairs, district success requests of superiors, demands of teachers and parents, and practicality in the task. Thus, they argued that inconvenient and untimely, situational and instantaneous roles are effective in their actions to achieve organizational goals. The effect of situational and instantaneous roles in school management processes includes behavioral ambiguity of role ambiguity. Behavior ambiguity explains how to behave in various situations and the situation of meeting the expected results of the decision to be made (Bauer & Simmons, 2000). The fact that school principals are confident of their decisions when they determine their roles situationally can be discussed at this point. In parallel with this result, in a study conducted on the problems faced by school principals in school management, it was revealed that school principals produce formal and informal solutions to the problems encountered in schools (Aslanargun & Bozkurt, 2012). Role diversity or role changes in the duty environment for various reasons can enable situational decisions to be made in the assigned tasks. In a sense, it can be said that the effectiveness of the school and the consistent maintenance of the school culture can be hindered due to the fact that school principals, who undertake the role of the management of the school, make situational interpretation of their

duties and instant solutions to the problems they encounter in their duties. On the other hand, with the change in the meanings of what kind of situations constitute organizational effectiveness in schools, how school administrators should reflect school effectiveness is another problem (Aypay, 2015).

School administrators should be effective against the team working with the technical work that needs to be done in the schools. At the same time, they should be well equipped by having knowledge of the laws and regulations, the content of the curriculum and should be sufficient for the evaluation and development of the curriculum to implement the administrative processes well (Bakioğlu & Demiral, 2014). In a sense, school principals have important driving roles in the development and maintenance of school effectiveness. Given that the school is a social system, it requires the school principal to be a social engineer in establishing individual and organizational balance (Bursalıoğlu, 2013). Along with the changing, transforming and developing age characteristics, educational organizations as a dynamic environment affected by this change cause changes in social expectations towards the school. Despite the necessity of making use of rational decision processes, school administrators, since the aims of schools are generally based on values, decision-making bodies, and administrators cannot make or find rational choices (Bursalıoğlu, 2012). Similarly, school principals, who reflect their role ambiguity in the interpretation of the phenomenon of this research, also express the problem of competence. In a sense, the semantic reflection styles of school principals also revealed the situations in which they associate the phenomenon of role ambiguity at the level of competence.

The acceleration of the training of school principals, considered within the scope of the 2023 education vision, is a positive and important development. It is deemed important for the title of the school principal to become a profession and to train school principals in this direction. In accordance with the modern understanding of education and the characteristics of the information age, schools that have great importance in shaping society should not be managed by the momentary decisions of the school administrators. In the past, many practices have been implemented by taking good perspectives to develop managerial competencies of the school principal and managers. However, obsolete practices no longer meet the requirements of the modern age. Thus, new applications should be able to meet the requirements of contemporary management understanding in a versatile way and explain the behavioral focus of the people who will undertake management tasks. Such that knowledge and social action are maintained interactively (Burr, 2012).

Schools, which are organizations affecting and influenced by society, should have experts and competent people in their management. Every step to be taken in this direction is critical in terms of increasing the quality of managerial and educational processes. When school principals in charge of school administration are trained as a versatile principal, their interaction with the experts in the organization will become more qualified (Bursalıoğlu, 2013). Therefore, international standards should be determined and selected and placed in school principal appointments (Balyer, 2012)

because "all the things that society has created for itself are brought to each individual through school" (Dewey, 1899, trans. 2010).

In line with the standards of the age, school principals should have awareness of the educational system, the roles of school management and the environmental factors affecting their roles (Gümüşeli, 2001). In a sense, school principals should have the necessary competencies to achieve the goals of the school and act with a sense of role in taking on and maintaining the role.

In this study, school principals stated that various tasks expected from them caused them to experience role ambiguity. There is ambiguity between the roles played by the school principals and the roles they should have (Reilly, 1984). School principals defined their interpretations, which would reveal the research phenomenon, with their views gathered around the elements of ambiguity sub-theme. They stated that if they experience role ambiguity, there are some indicators that cause this. School principals explained elements of ambiguity as non-identifiability, school principal appointment policies, politics, daily orders and pressure groups. They stated that they see the elements of ambiguity as the situations that affect the system more than the others and they are basically an indicator of role ambiguity. In parallel with this result, it was revealed that the reflections that explain the role ambiguity phenomenon and the problems that caused them to experience role ambiguity were found to be related to the organizational ambiguity of the influence framework theme and the pressure groups sub-theme.

School principals have reflected that the elements of uncertainty they expressed as external indicators are administrative gaps, the schism within the school, role conflicts, behavioral diversity and role playing. The external indicators category reflecting the interpretation of role ambiguity revealed that it is related to the expressions in the professional profile category of the ambiguity mirror sub-theme of the influence framework theme. Based on the opinions of school principals on role ambiguity in the schools, it has been understood that role ambiguity caused them to experience administrative changes and this has effects on the educational process and hence it causes social change.

It can be said that the relationships that emerged under different categories in the first theme of the study affect each other and affect the perceptions of the school principals in their experiencing processes. Although they experience being the school principal through different experiences, it has been frequently stated that they do not know their roles exactly and they experience role ambiguity in different contexts. In addition, job descriptions of school principals do not correspond to the duties and descriptions required from them. We can say that this situation also negatively affects quality assurance in school management. Quality assurance in education explains the guarantee that the systematic management process will be accepted by the institution and assurance will be provided to individuals (Bakioğlu & Baltacı, 2017).

The second theme of the research, the influence framework, explains the factors affecting the role ambiguity of school principals as organizational ambiguity, pressure groups and ambiguity mirror. In addition to the influence framework theme, the solution paths sub-theme also explains the strategies that can be established against role ambiguity. In the organizational ambiguity sub-theme, which affects role ambiguity, school principals reflected the reasons for ambiguity in administrative processes as central administration, bureaucratic processes, educational policies, politics, systemlessness, indefinition and pressure groups. In the opinions at this point, it was revealed that the ambiguities affecting the administrative processes of school principals coincided with the category expressed as the elements of ambiguity in the first theme. On the other hand, in their interpretation of the phenomenon of role ambiguity, we can say that school principals are aware of the relationship with administrative processes due to their roles with internal indicators. In a sense, although school principals experience role ambiguity, they are able to monitor and identify the elements that will provide role awareness. School principals stated about educational processes that affect role ambiguity as school principal appointment policies, educational status of school principals, deficiencies in the professional development of school principals, communication problems and lack of awareness of role. School principals emphasized the necessity of questioning the quality of teacher training in undergraduate education and reflected the category of educational status affecting role ambiguity starting from the profession/job decision. In a sense, it is deemed necessary by participating school principals to have qualified teacher training processes and to create a sense of role.

School principals stated that pressure groups affect school management and education processes. In this context, pressure groups that affect school processes increase the ambiguity of the roles of school principals and also negatively affect their motivation. School principals refer to pressure groups as schism groups against management, complaint lines, charity organizations and unions. In their evaluations concerning school processes, they justified the effects of the administrative change that could lead to educational transformation and qualitative change in society.

In the professional and personal profile expressions reflected in the ambiguity mirror sub-theme of the role ambiguity influence framework theme, the situations where the school principals position themselves against their experience of role ambiguity are explained. In a sense, school principals hold a mirror to themselves during the research process and face the realities in the reflection they see. In their opinions expressed in their professional profile, they make explanations about the role conflict, being a person who responds to daily roles, being an administrator, being unauthorized, diversity of educational background, aimlessness, inconsistent behaviors, unfair behaviors, not being able to establish a system, and role-playing behaviors. In this context, it can be said that school principals are approaching the processes of alienation to work. It is known that in case a situation of alienation to work within the organization; dissatisfaction with the work, low motivation, decreased

organizational commitment, negative feelings and unwillingness about the work and organization take place (Demirez & Tosunoğlu, 2017). In personal profile, school principals reflected ineffectiveness, inefficiency, inconfidence, psychological problems, physiological problems, low motivation, lack of self-confidence, insincerity, inability to take the initiative, lack of communication and confusion. The concept of exhaustion, which emerges as a negative result of role ambiguity, also explains these results. Exhaustion is explained as a psychological reaction to factors that may cause stress in the work environment (Tolay Sabuncuoğlu, 2008; Maslach et al., 2001). It was revealed that the study was related to the opinions explaining the reflections in ambiguity mirror as well as the expectations that cause the school principals to experience role perception and role ambiguity. The fact that the expressions discussed in the research phenomenon overlap with the professional and personal profile evaluations reveal the consistency between both themes. In a sense, the meanings of role ambiguity of school principals can explain their profiles in a holistic way.

The views that school principals express solutions to role ambiguity are explained by orientation to the target and standards categories. In this context, for solutions to role ambiguity, they expressed strategies to pave the way to the target, such as the necessity of general objectives of the Ministry of Education objectives, vision and mission studies, strategic plan applications, particular objectives of the school, educational purposes, administrative purposes, educational roles, trust in school principals, right to delegate authority, talent management practices, systematic approaches and being informed in administrative processes. The fact that orientation to target occurs in the direction of determining and defining standards has revealed the view that clarifying the standards will provide equal conditions. In this context, the necessary standards expressed by school principals are aligned with the conditions, such as the educational status in accordance with the professional point of view of the school management, clarity of the job descriptions, the clarity of the legal definitions, objective criteria for the appointment of the school principals and a career step for being the school principal. On the other hand, the abstraction of legal definitions is explained as one of the natural and necessary features of this field. The reason why the statements are abstract in legal terms is that reality develops in its own way. For this reason, from a legal perspective, it can be said that school principals should be in a position to take the initiative at necessary points. On the other hand, when the semantic foundations of the relationship and overlap between research themes are examined, lack of supervision is also effective in school principals' experience of role ambiguity. For this reason, it can be said that contemporary control and management processes should be carried out in a trust-oriented manner to get rid of all kinds of internal and external negative effects in schools for the purposes of MoNE. As a result, the school principal duty should be transformed into a professional job.

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