

# ONLINE PRESCHOOL EDUCATION DURING THE COVID-19 PANDEMIC: TEACHER EXPERIENCES

Merve Özer-Akkaya<sup>1\*</sup>, Bilge Çam- Aktaş<sup>2</sup>

<sup>1</sup>Department of Child Development, Anadolu University, Eskişehir,

Turkey <sup>2</sup>Department of Educational Sciences, Anadolu University,

Eskişehir, Turkey [ozermerve339@gmail.com](mailto:ozermerve339@gmail.com)<sup>1</sup>, [bilgec@anadolu.edu.tr](mailto:bilgec@anadolu.edu.tr)<sup>2</sup>

\*Corresponding Author

**Received:** 29 December 2022; **Revised:** 22 October 2023; **Accepted:** 26 November 2023; **Published:** 04 December 2023

**To cite this article (APA):** Özer-Akkaya, M., & Çam Aktaş, B. (2023). Online preschool education during the COVID-19 PANDEMIC: Teacher experiences. *Southeast Asia Early Childhood Journal*, 12(2), 55–95. <https://doi.org/10.37134/saecj.vol12.2.4.2023>

**To link to this article:** <https://doi.org/10.37134/saecj.vol12.2.4.2023>

## ABSTRACT

Due to the global COVID 19 PANDEMIC, face-to-face education was suspended, and distance education was adopted in all education levels. Various measures were implemented to ensure continuous education in the preschool level, where distance education was adopted for the first time in history. The present study aimed to determine the views and experiences of preschool teachers on distance education. The study was conducted with the phenomenology approach, a qualitative research method, and semi-structured online interviews were conducted with 9 preschool teachers, who were employed at schools that served various socioeconomic levels in different cities, using the developed interview form. The content analysis conducted in the study that preschool teachers had similar negative experiences such as problems associated with Internet connection and infrastructure during the distance education process, technology adaptation problems of low-income parents, low online class participation, and difficulties associated with fulfilling the individual needs of the children. Furthermore, teachers also had positive experiences such as higher parental participation, better recognition of the teacher's role in education, integration of technology in education, e-content development, and professional development in distance education. Various measures should be adopted to ensure equality of opportunity in distance education based on the present study findings.

**Keywords:** preschool education, distance education, Covid-19 pandemic

## INTRODUCTION

The Covid 19 virus, first observed in Wuhan, China in December 2019 and first case of which was recorded on March 11, 2020, in Turkey, and turned into a pandemic, led to radical changes in the lives of all individuals. Significant changes were experienced education, and distance education method was adopted after the suspension of face-to-face education at all educational levels in the world and in Turkey. Thus, it was reported that the impact of the Covid 19 pandemic on education was the most significant interruption in education in history (Yıldız & Akar-Vural, 2020). To eliminate the possible negative effects of this interruption and to continue educational activities, the nations employed various channels such as the radio, television and internet for

educational purposes. The educational activities were christened as “emergency distance education” in this period (Hodges et al., 2020). It was reported that 770 million students all over the world were affected by the pandemic (Zhong, 2020), corresponding to 92% of the students worldwide (UNESCO, 2020).

The intense employment of distance during the Covid 19 pandemic had certain advantages such as providing access for large audiences without the limitation of time and space, allowing the students to learn at their own pace, and reducing costs, as well as certain disadvantages such as difficulties to work within groups, technology dependency, and limited measurement-evaluation capabilities (Elitaş, 2017). Preschool children were among the groups that were most adversely affected by the pandemic and moved less and adopted unhealthy diets due to spending a lot of time on digital devices during online education, affecting other developmental areas in the children (Brooks et al., 2020). Dependence on technological tools increased during the pandemic (Aral & Kadan, 2021). Furthermore, in the above-mentioned age group where social development is significant, the social skills of the children were adversely affected by the lack of schooling.

However, the pandemic also had certain positive effects on pre-school education. Especially, the increase in the time spent at home improved parent-child interaction (Bjorkdahl & Carlsen, 2019), teachers had the chance to focus on professional development and recognize the significance of cooperation with parents (Can & Günbayı, 2021). The increase in parental involvement after the pandemic allowed the parents to witness the instruction process more, increasing their respect for the teaching profession (Aral & Kadan, 2021; Özdoğru, 2021).

During the pandemic, nations had to adopt different measures based on their development levels. Several countries closed the schools nationwide, others such as Brazil and India expanded the initial partial closure later on. China and Italy adopted online education, while Vietnam and Mongolia adopted distance education with television and phones. Rain Classroom Instruction Platform that has been actively employed in China since 2016, providing access to more than 19 million subscribers, was actively employed during the pandemic and strengthened the internet infrastructure in China. The Netherlands provided laptops for several socioeconomically disenfranchised students (Sözen, 2020). In Italy, Reggio Emilia schools adopted the "school at home" and "play at home" methods in distance education. The teachers sent lists of games that students could play with their parents at home and transferred preferred storybooks into audiobooks and sent those to the students.

They also published these audiobooks on the school web site for all to download (İnan, 2020). France developed distance education virtual classrooms based on the "my classroom is at home" application (Yılmaz et al., 2020). Mongolia broadcasted courses in various languages such as Mongolian and Kazakh on 16 TV channels (Can, 2020). Instruction was conducted with homework assignment in Lebanon, while Bulgaria allowed access to digital resources for all teachers and parents and conducted the educational activities on two national TV channels (Balcı, 2020). Saudi Arabia employed the official Twitter account to provide information for the students (Can & Günbayı, 2021).

Concurrent with global educational measures, Turkey suspended face-to-face education on March 13, 2020. On March 23, 2020, distance education was adopted and the rest of the 2019-2020 academic year was conducted with distance education (MEB, 2020a). The Educational Information Network (EBA), which was first implemented in the 2011-2012 academic year as an extension of the Fatih Project, was employed actively during the pandemic. EBA was developed to include rich educational content, integrate information technologies and educational activities, to use technology as an educational tool, and to allow the students to reconstruct knowledge (MEB, 2016). Since not everyone has access to EBA, TRT EBA TV channels were established during the pandemic (Öztürk & Çetinkaya, 2021). Between March 23 and June 19, 2020, a total of 2516 hours of educational programs were broadcast on the TRT EBA TV Primary School, TRT EBA TV Middle School and TRT EBA TV High School channels, where each class lasted between 20 and 25 minutes in all grades (MEB, 2020b). For students who could not access distance education, 14570 EBA support locations and 175 mobile support locations were established (MEB, 2021). The EBA infrastructure facilitated the transition to the distance education in Turkey (Avcı & Akdeniz, 2021).

However, the preschool education could not adequately utilize the EBA platform (Ilgın & Ulupınar, 2021). It was reported that the distance education was quite novel in pre-school education, and due to the low pedagogical competence of the parents, it was not successful (Erol & Erol, 2020). Especially during the initial months of the pandemic, no activities were conducted on EBA for preschool children (Can, 2020; Konca & Çakır, 2021). On March 12, 2020, TRT EBA Kindergarten programs were initiated on the TRT EBA Primary School channel and provided 2 daily classes for the children at 8.00 and 19.30 during weekdays. TRT EBA Kindergarten, presented as "The World's Largest Unwalled Kindergarten," included the calendar, activities and family sections. The calendar section included topics such as the date, season, colors and shapes to start the day, while the activities section included various Turkish language, science and art activities instructed by preschool teachers. The family section included recommendations for the parents about the activities they could conduct at home during the pandemic (Hürriyet, 2020).

Furthermore, various measures were adopted in pre-school education due to the developments during the pandemic. Both face-to-face and distance education were adopted during the pandemic in preschool education; however, mostly distance education was adopted in the beginning of the pandemic. Due to the development of children, it was announced that face-to-face education should be prioritized, and in cases where face-to-face would not be possible, teachers should communicate with parents using phone calls and online groups. It was also announced that the daily education should be planned for 6 activity hours, each activity hour should not exceed 20 minutes, guidance should be provided for the parents about the implementation of daily education, and certain activities such as experimentation and reading stories could be videotaped and communicated with the parents. Furthermore, teachers should provide live or EBA courses 3 times a week, and should communicate with the children who could not attend online classes individually at least 3 times a week (AA, 2020). It was also recommended that children should watch the EBA classes.

The literature review revealed limited number of international studies on distance pre- school education (Hartatik & Fulka-Bia'yuni, 2020; Kim, 2020) and domestic studies on the effects of the pandemic on education (Alper, 2020; Balcı,2020; Baz, 2021; Can, 2020; Çiçek et al., 2020), the views of teachers in different branches on the pandemic (Akkaş-Baysal et al., 2020; Arslan & Şumuer, 2020; Avcı &Akdeniz, 2021; Balaban & Hanbay-Tiryaki, 2021; Can & Günbayı, 2021; Çakın & Külekçi- Akyavuz, 2020; Demir & Özdaş, 2020; Kurnaz et al., 2020; Metin et al., 2021; Moçoşoğlu & Kaya, 2020; 2020; Özdoğru, 2021) and the views of parents on the pandemic (Kabapınar et al., 2021; İnci-Kuzu; 2020). In pre-school education, limited number of studies on parental views on the pandemic (Akin & Aslan, 2021; Akkaş- Baysal et al., 2020; Demir-Öztürk et al., 2020) and teacher views on the pandemic (Aral & Kadan, 2021; Aykar & Yurdakal, 2021) were conducted. Thus, it was considered that the present study would contribute to the literature.

The distance education, which was a novelty in several educational levels, was introduced for the first time in preschool education. In the process, the roles of teachers who develop a learning environment and conduct learning activities increased. The knowledge on the experiences of pre-school teachers, who were unfamiliar with distance education, would allow the development of better distance education applications that would lead to better educational and instructional activities in the future. Thus, the present study aimed to determine the views and experiences of preschool teachers on distance education. Based on the aim of the study, the following research problems were determined:

1. What are the experiences of teachers in the distance education learning and instruction processes in preschool education during the pandemic?
2. What are the experiences of the teachers with parents in distance preschool education during the pandemic?

## **METHOD**

### **The Research Model**

The current qualitative study was conducted with the phenomenology method. Phenomenology focuses on the perceptions, experiences, perspectives and interpretations of the individuals (Yıldırım & Şimşek, 2018). The method aims to reveal, comprehend and interpret the essence of the experiences associated with the related phenomenon (Baş & Akturan, 2017). The present study focused on the views of preschool teachers on distance education and their experiences in distance education.

### **The Study Group**

Since phenomenological studies aim to determine the views on a phenomenon, the individuals who experienced or still experience that phenomenon are included in the study group. The aim is the quality of the collected data rather than the sample size (Baş & Akturan, 2017). Thus, the number of participants generally varies between 3 and 10 (Creswell, 2014).

The purposive sampling method was employed to assign the study group members, since the aim was to reveal the essence of the experiences in the phenomenological study (Baş & Akturan, 2017). Thus, the study was conducted with nine preschool teachers, who were employed in different provinces with different socioeconomic levels, were determined with the purposive sampling method. The differences between the experiences of the teachers in distance education were analyzed based on the institution of employment and the socioeconomic level of the institution. The teachers were initially contacted by phone and their experience levels in distance education were determined during the pandemic. Interviews were conducted with volunteering teachers who instructed live courses. Interviews were conducted online due to the pandemic conditions and the fact that the teachers lived in different cities. Informed consent forms were signed by the volunteering teachers and the interviews were video recorded. Due to ethical concerns, each teacher was assigned a codename to keep the identity of the teachers confidential. The socio-demographic data about the participants are presented in Table 1.

Table 1  
*Participant Demographics*

Teacher	Seniority	Education level	Type of the institution of employment	Socioeconomic level of the institution	Age group of instruction	In-service training on distance education
Ayla	10 years	Undergraduate	Ankara-Center Private kindergarten	High	48 months	Yes
Özlem	9 years	Associate Degree	İstanbul-Center Private kindergarten	High	36- 60 months	No
Bensu	7 years	Associate Degree	İstanbul-Center Private kindergarten	High	36-48 months	Yes
Nilay	6 years	Undergraduate	Kahramanmaraş Kindergarten district	Medium	48-66 months	No
Esin	6 years	Undergraduate	Tokat-village Kindergarten	Medium	48-66 months	No
Öykü	4 years	Undergraduate	Muş-district Public kindergarten	Medium	60 months	No
Ebru	5 years	Undergraduate	Urfa-village Kindergarten	Low	48-66 months	No
Beril	5 years	Undergraduate	Kars-village Kindergarten	Low	48-66 months	Yes
Emel	5 years	Undergraduate	Gaziantep village Public kindergarten	Low	60 months	No

As seen in Table 1, the professional seniority of the teachers was different, and they were employed in private/public kindergartens or kindergartens that serve within primary schools in different cities, villages, and urban centers. Also, the teachers instructed different age groups. Only 3 teachers attended in-service training on distance education, and two of these teachers were employed in private kindergartens.

### **Data Collection Tools**

Several data collection techniques such as observation, interviews and document analysis are employed to collect data in qualitative research. In phenomenological studies, interviews are employed as the fundamental data collection instrument (Yıldırım & Şimşek, 2018). The study data were collected with a semi-structured interview form since it allowed the expansion of the topic and the development of new topics with different questions during the interview (Merriam, 2015).

The interview questions were developed based on the literature review and the aim of the present study. Furthermore, a "Demographic Data Form" was developed to determine participant demographics. The draft interview questions were submitted for the review of five experts in the field of pre-school education to ensure the validity and reliability of the study. New questions were added, and certain questions were edited based on the expert opinion. The final interview form included ten open-ended descriptive, narrative and investigative questions that reflected the perceptions and experiences of teachers in distance education during the pandemic.

### **Data Collection**

Before the online interviews, the aim of the study was briefly explained to the teachers and the interviews were recorded after the informed consent was obtained from the participants. When an explanation was required, when the participants gave unrelated answers or were incomplete, questions such as "Can you give an example?", "Can you elaborate on this " were asked to collect in-depth data. The interviews lasted an average of 45 minutes.

Each interview was transcribed by the author. The audio records were checked again to ensure the accuracy of the transcription. The transcripts were finalized after the missing or incorrect statements were corrected. The transcription included both the question and the answer of each interviewee.

### **Data Analysis**

Content analysis was employed in the analysis of the study data. Content analysis aims to determine correlations that explain the data and present the data with a comprehensible approach (Yıldırım & Şimşek, 2016). In the present study, the main themes and sub-themes were determined based on the teacher responses and the content analysis. After the transcription and the determination of data reliability, the author listed the important statements for the aim of the study. Those that were not consistent with the study aim were excluded. The themes were based on the interview questions and similar or different teacher views on distance education.

In order to ensure reliability during data analysis, the two authors independently conducted the content analysis and then agreed on the themes. The data analysis revealed 3 themes and 11 sub-themes. In qualitative research, direct quotations are frequently reported to reflect the views of the interviewees (Yıldırım & Şimşek, 2016). Thus, the validity of the study was improved with the inclusion of direct participant quotes.

## **RESULTS**

The data analysis revealed 3 main themes and 11 sub-themes in the study. These themes and sub-themes are presented in Table 2.

Table 2  
*The main themes and sub-themes.*

Learning – Teaching Process	Parental Participation	Teacher
Live online course	Perspective on parental participation	The advantages of distance education for the teacher
Face-to-face education	The factors that affect parental participation	The disadvantages of distance education for the teacher
TRT EBA Kindergarten	Efforts to improve parental participation The advantages of parental participation The advantages of parental participation Parental participation activities	

### **Learning-Teaching Process Findings**

Findings on the learning-teaching process were analyzed based on 3 main themes and 6 sub-themes. Detailed data on these themes and sub-themes are presented in Table 3.

Table 3  
*Learning-teaching process themes and sub-themes*

Learning – Teaching Process
Live Online Course
Pre-Live Online Course Process
Live Online Course Process
Activity Principles
Attractiveness
Ability to conduct the activity with domestic material
Active Participation and movement requirement
Short duration
Stimulating prior knowledge

*continued*

Creative	
Activity Types	
Music	
Turkish	
Movement	
Game	
Art	
Science	
Integrated	
Advantages of Live Courses	
Positive impact on domestic-family life	
Recognition of child traits	
Contribution to self-regulation skills	
Disadvantages of Live Courses	
Low participation	
Connectivity problems	
Inability to fulfill personal needs	
Short attention span of the children	
Communication problems	
Class management problems	
Extreme exposure to technology	
Short class hours	
Inability to repeat	
Inadequate feedback	
Inadequate peer instruction	
Noise	
Limited measurement-evaluation	
Post-Live Online Course Process	
Face-To-Face Education	
Repetition of Distance Education	
Comparison of Distance and Face-To-Face Education	
Disadvantages of Face-To-Face Education	
Fulfillment of self-regulation requirements by the parents	
Extreme movement requirements of the children	
Omission of school rules	
Omission of learned concepts and acquired skills	
Distractibility	
TRT EBA Kindergarten	

---

As seen in Table 3 the themes and sub-themes such as live courses, face-to-face education and TRT EBA Kindergarten were obtained in the learning and teaching process. The findings are presented in relevant sections.

## **Live Online Courses**

This theme included the “pre-live course process” and “post-live course process” sub-themes.

### **Pre-Live Course Process**

Teacher Özlem stated that she informed the children about the distance education process before the live courses. She stated the following:

*We provided clear information to the children. Yes, there is a virus right now, we cannot go out. When that virus was first observed, we had a talk with the children in March. The school will be closed. Until the virus is gone, we will continue to see you on the computer, on the phones and tablets of your mothers.*

Teacher Nilay stated that she spoke with the children about what they wanted to learn before the live course:

*We spoke with the students individually. We asked the children, ‘What would you like to do in live courses?’ And we told to those who did not reply that they should draw a picture about it and let their mothers to send the picture. Let me interpret what you want to do and include it in live courses.*

### **Live Course Process**

The live course process sub-theme was analyzed based on the "activity principles", "activity types", "advantages of live courses", "disadvantages of live courses" and "post-live course process" sub-themes.

#### **Activity Principles**

The teachers stated that they prioritized the organization of attractive activities (5), those require the employment of household material (4) and active participation and movement (1), short duration (1), that stimulate prior knowledge (1) and creative (1) activities.

The teachers stated that they cared about maintaining the interest of children during live courses. Teacher Esin stated that she included experts in the process to raise the interest of children:

*A friend of mine published a children's book. I invited this friend to the class to read the story. My friend also had a puppet. The title of the children's book was ‘Only an Armadillo.’ My friend narrated the story using the armadillo puppet.*

Teacher Beril, on the other hand, stated that she raised the interest of the children using visuals:

*“I shared images mainly with the parents. These were videos or photos. I tried to raise the interest of the children with these.”*

The teachers stated that they planned activities that could be conducted with household materials. Teacher Nilay stated the following:

*“But whatever they had at home, whatever was available in nature, whatever came to their minds; dishware, stones, leaves... Our priority was easy accessibility.”*

Teacher Esin stated that she planned activities that children could actively participate in live courses:

*Therefore, I tried to combine movement, communication and similar things to activate the children and make them speak more, and active children do not get bored easily. For example, when I read a story, we turned a dance [son] before the story, and we danced together.*

Teacher Bensu stated that she prioritized active participation of the children in the activities:

*“It was like pouring water from one bowl to another with sponges. It was always like that, things they could participate.”*

Teacher Nilay stated that she conducted short activities in live courses:

*“...I tried to conduct short activities based on conversations where I could provide immediate feedback that they could write down on paper rather than long activities due to their age.”*

Teacher Ayla stated that she activated children's prior knowledge as follows:

*Actually, we also repeated what we learned or exhibited at school. For example, the child did not hear that song for the first time. It was not the first time the child heard that story. You know, there was a game we watched, a song we played, now let's play it together, okay?*

Teacher Nilay stated that she planned creative activities:

*“We tried to include more creative activities. Because the structured activities were very difficult even in face-to-face, and it was not possible to conduct them in distance education.”*

## The Types of Activities Conducted in Live Courses

The teachers stated that the activities they conducted during live courses included music (7), Turkish (5), movement (4), game (3), art (3), science (3) and integrated activities (2). They stated that these activities supported the cognitive and language development of the children the most, and contributed to the social-emotional development, psychomotor development, and self-care skills the least. Teacher Benu stated the following:

*“Also, I think that we supported cognitive skills during one-on-one sessions, language skills during playdough sessions, and motor development when we transferred liquid from one bowl to another and during physical education sessions.”*

Teacher Ebru stated that she developed worksheets to support the cognitive development of children:

*“The worksheets included pairing all concepts. We developed a 100-page book for each child at school. Patterns. They could do them at home since they have already did them at school.”*

Teacher Beril stated that the language skills of the children developed the most in the process:

*“I think that the language skills developed the most. Because, as I said before, we communicate with each other mostly verbally. That was why I think children's self-expression skills developed more.”*

Teacher Esin stated that the children experienced difficulties in the development of self-care skills:

*“Because we could not demonstrate the self-care skills visually on Zoom. Face to face was more comfortable.”* Emphasizing parental support to develop self-care skills, Teacher Özlem stated the following: *“It was very challenging. Parents are very involved there. We always have to cooperate with the parents.”*

On the contrary, Teacher Ebru, who worked at a village kindergarten, stated that the children were good at self-care skills and she did not need to improve these skills in live classes. The children in urban centers and in big cities do these with the help of their mothers; it is not like that in here. They prepare breakfast themselves. He sent me a video of preparing eggs. Children raise themselves. So, self-care is great.

Musical activities were the most preferred activity by the teachers in live classes.

Teacher Emel stated the following on musical activities in live classes:

*“I brought musical instruments from the school for music activities. Rhythm instruments such as xylophone. I brought them.”* Teacher Esin stated she invited an expert for musical activities: *“For example, I invited a friend who plays the ukulele. He played children's songs. We sang children's songs.”*

Teachers stated that they mostly read stories in Turkish activities in live classes. Teacher Nilay provided the following example for Turkish language activities in live classes:

*We developed stories, we stopped in the middle, and asked the students to complete the story. We asked them to complete it by drawing a picture. We allowed their peers to provide feedback. How did you find the story, what can you add, what can we omit?*

Teacher Ebru did not conduct Turkish activities due to the language problem:

*“I can do it in face-to-face education, but not in live courses. I tell the story with facial expressions and imitations. But otherwise, it was very difficult.”*

Teacher Öykü stated that she experienced difficulties while conducting movement activities:

*“...we do those movements. I could not see what the children did during musical movements because there were problems in the first settings. I only saw their heads moving, for example.”*

Teacher Esin stated that she included game activities in live classes:

*Or, we played interactive games where children could participate. We played wheel games. When you share your screen with the children, the children spin the wheel. Let us say that the wheel stops at jump 3 times. Independent of the child who span the wheel, all children jump 3 times or let us say the wheel stopped at say mee 2 times. Let us imitate the sound of an animal.*

Teacher Beril stated that she focused on production of material in art activities:

*“For example, in art activities, I focused on the production of materials and tools that I generally use in other activities. We could both conduct the art activity, while preparing for other activities.”*

Teacher Esin stated that she conducted the science activities more easily in live classes:

*Separate screen time for each and every one of them. It is harder in the classroom. Or I must show it. It could not be even called an experiment. But, when you are on the screen, everyone's material is ready. The experiments were better for me.*

In contrast, Teacher Ebru stated that she experienced difficulties in science

activities: *“The least activities we can conduct here are the science activities.*

*Because*

*they need material in these. They always have nature activities that they conduct in the garden. I experience difficulties in advanced science activities that require material.”*

Teacher Emel stated that she integrated musical, movement and mathematical activities in live classes:

*For example, I combined them with mathematics, for example, by clapping hands twice, tapping on the eyes, etc. And the physical and musical movements based on a pattern. For example, clap hands, hit the chest, hit the knee. This continued within a pattern. I tried to instruct them as whole as possible.*

### **Advantages of Live Classes**

According to the teachers, the advantages of live classes included interaction with the child (4), positive impact on domestic life (3), recognition of various traits of children (2), and contribution to the self-regulation skills of the children (1). Teacher Nilay stated that she cared about interacting with the child rather than the activities in live classes:

*“We prioritized that the children should see each other and their teachers, do not forget the school environment that school is still an ongoing process, rather than activities in distance education.”*

Teacher Özlem stated that the live classes had a positive effect on the child's domestic life:

*She missed you so much. It was so good for her. You were very welcome. She is very happy with what she did today. The days with live classes were without a crisis. On the days without live classes, there was always a crisis.*

Teacher Ayla stated that she got to learn about the different traits of the children:

*“You notice two different aspects about the children. They can express themselves more comfortably on the screen while they are shy in class. One sees that the children cannot express themselves when speaking in the classroom.”*

Teacher Öykü stated that children's self-regulation skills improved during live

classes: *“Children learned to use the computer or the phone alone.”*

## Disadvantages of Live Classes

According to the teachers, the challenges they experienced in live classes included low student participation (6), connectivity problems (5), inability to fulfill the individual needs of the children (4), short attention span (4), communication problems (3), classroom management problems (2) excessive exposure to technology (2), short class hours (2), the lack of repetition opportunity (1), the inability to provide adequate feedback (1), the lack of peer education (1), noise (1), and limited assessment and evaluation (1).

Teacher Özlem stated that participation in live classes decreased over time during distance education:

*“Or, 20 people participated at first, then 15, then 5. There was a decline. Because then they were bored with the screen.”*

Teacher Nilay stated that parents cared more about the classes of their older children, and certain with older siblings could attend the class:

*“... and several of my children, unfortunately, could not access the Internet because they zoomed more and cared more about their classes. I had a maximum of 5 parents, yes, I can say that they managed the process very well.”*

Teacher Ebru stated that she experienced difficulties due to the technological infrastructure:

*“In the first 10 minutes, we had to determine who were connected and who could not due to the infrastructure. The productive time was 20 minutes.”*

Teacher Emel stated that parents had internet access problems:

*“Some do not have internet at home. In fact, some houses are detached homes. How should I say, is the base station far away, or those on the ground floor cannot even access WhatsApp.”*

Teacher Nilay stated that she experienced difficulties in meeting the individual needs of children in live classes:

*“Because my children were all different, they all have different needs and I wanted to give them a voice. I failed this sometimes. This challenged me a lot.”*

Teachers stated that the short attention span of the children in live classes was a disadvantage in conducting activities. Teacher Benu stated the following:

*Because it is very difficult to keep 3-4 years old children in front of the screen. Even in the classroom, the attention span of the children varies between 5 and 15 minutes, especially when they are at their desks,*

*we cannot keep them there that long. We had really a hard time in keeping them on the screen.*

Teachers stated that they implemented certain changes in the environment and in themselves to raise the interest of the children in live classes. Teacher Bensus stated that she tried to make the home environment similar to the school environment:

*I changed my background to a class picture. I was exactly the way they saw me at school. I dressed the same way; I did my hair the same every day. I even wore clothes that they saw before. I did not think I was home. I tried to dress the way I came to school, the way they saw me before during those 2 months.*

Teacher Bensus stated that she experienced communication problems with foreign students in her class in distance education:

*Some students were foreigners. They did not spoke Turkish. We had a harder time. For example, I had a Russian student who knew very little, a few Turkish words. We continued to speak in English with him for a while, until I taught him Turkish...*

Teacher Beril, on the other hand, stated that she experienced problems with bilingual children in live classes:

*There is the problem of bilingual children in my village. Children mostly start the kindergarten without speaking any Turkish, or those who did not have the chance to attend kindergarten start the 1st grade without speaking Turkish. That was why we had to prioritize language.*

Teacher Nilay stated that she had difficulties in classroom management in live classes:

*“But it was not easy to ensure attendance and manage the class in those 20 minutes. That was the thing I had the most difficulty with.”*

Certain teachers stated that children lost interest in live classes because they were exposed to too much technology. Teacher Özlem described her experience as follows:

*“We continuously sent videos, asked them to look at the photos, and participate in Zoom ... This could also led to the loss of the child’s attention on the screen, and the things you send lost their significance.”*

Teacher Nilay stated that the live class hours prescribed for the pre-school education were not sufficient:

*“Because the time was very limited. At first, we almost only chatted. Our conversations, frankly, were like ‘kids, let me talk, and you be quiet,’ 10 minutes passed like this.”*

On the other hand, Teacher Öykü argued that she could not use the time effectively due to the connection problems:

*I was the first to log in, while the children tried to get connected. Some of them could, others said that they still try. The parents stated that the system does not allow connections. I tried to chat with other students, while I waited for the others to connect. Then the time was almost up.*

Teacher Bensu complained that she could not repeat the topic in live classes:

*“But that was not possible here, because when you start a song one more time, they get bored and leave the screen. That was why I could not repeat the instruction sometimes.”*

Teacher Emel stated that she could not conduct peer education in live classes:

*We teach chess. Peer education. For example, those who can play chess teach those who do not in the class. They do this without letting me know. We adopted this as a system. We are quite systematic in the class. For example, we could not conduct peer education in live classes.*

Teacher Emel stated that she experienced noise problems in live classes:

*“...The live courses were interrupted due to the lack of infrastructure or there was a stove in their room at home, and everyone was in the same room. It was really noisy.”*

Teacher Nilay stated that she could not evaluate the children due to the screen time in live classes:

*“The screen time gets longer. Not to increase it further, we could not measure that much in live classes. How much could they acquire, how much of it was reinforced?”*

### **After the Live Class**

The participant teacher Bensu stated the following:

*“I provided information about the next activity in the next class at the end of each class. ‘Here is what we're going to do.’”*

She also stated that after the live course, she organized individual live class hours with some children:

*I had students who could have missed me. There were students who wanted to talk to me. Then, we turned on opening Zoom again in the form of active sharing with the parents or spoke with the children. Or we conducted further hours of participation. One by one...*

## **Face-to-face Education**

This theme included the repetition of distance education, comparison of distance education and face-to-face education, and problems in face-to-face education sub-themes.

### **The Repetition of Distance Education**

The teachers stated that when face-to-face education started, they included the repetition of the concepts and skills they discussed during distance education. Thus, Teacher Benu stated the following:

*“As soon as the schools were reopened, we transformed the concepts we discussed into a game played it face-to-face.”*

Similarly, Teacher Beril stated the following:

*“I definitely repeated the activities conducted in distance education when we went back to face-to-face education. In fact, I conducted certain activities exactly the same as we did in distance education.”*

### **The Comparison of Distance and Face-to-face Education**

All teachers stated that they preferred face-to-face education when compared to distance education in pre-school education. Teacher Emel stated that;

*“It could never replace face-to-face education. Because we can do more in face-to-face education.”*

Similarly, Teacher Benu stated that she realized the importance of face-to-face education during the distance education:

*“Because being with them and touching children is a great and special feeling. I had never felt this before the pandemic. Telling them something and feeling their warmth, or when they ask a question and calling your name and sharing things were really different.”*

Teacher Ebru stated that she conducted more activities in face-to-face education when compared to distance education:

*“Because it could not replace face-to-face education; while we could conduct a lot of activities, we conduct a limited number of activities, and the activities were more limited.”*

However, Teacher Nilay stated that she realized that distance education could also be conducted in the pre-school education:

*“It was something I would actually consider impossible. I would say that it would be impossible to conduct activities while the students were on their computer screens. It was not common sense. But it was*

*possible.”*

Teacher Esin discussed her views on the benefits of distance education as follows:

*“It was both beneficial and harmful. I realized this. The experts, who I could not invite to the classroom, the children had a chance to meet them online.”*

Teacher Ayla stated that she was more positive about the distance education during the pandemic:

We are more experienced now. At least, since we know the disadvantages, I think we can communicate a little better with the parents next time. Maybe we can put our worries aside and do not mind since we have already experienced these.

Teacher Beril stated that she reached the children who could not attend the school with distance education and her views were positive about the distance education:

*“Children could not attend school. Then, they can attend the class online, or the parents could learn what they can do at home. That’s why distance education has certain advantages.”*

#### The Problems Experienced in Face-to-face Education

Certain teachers stated that they experienced some problems after the face-to-face education was reinitiated. The most frequent problem was the fulfillment of self-care by the parents (3), the need for excessive movement (2), forgetting the school rules (2), forgetting the learned concepts and skills (1), and distraction (1).

Teacher Ayla stated that the children's self-care requirements were met by their parents at home:

*“Every child could meet her or his own needs. But what happened during this process? Schools were closed, one realized that the parents did many things. They were a bit delayed.”*

Teacher Özlem observed that children were extremely active during the face-to-face education after the distance education was terminated:

*When the children meet their friends, they just want to run. They do not want to sit down and study. For example, the classroom is empty now, they are in the garden. They remain in the garden for at least 5 hours until noon. The children never want to study math, study the concepts of greater and smaller than in the classroom, never.*

The teachers stated that the children had forgotten the school rules when the face-to-face education was reinitiated. Teacher Bensus stated that:

*Yes, we started to explain the school rules again. Because we had*

*taught the children that the school has certain rules. They learned, but during the 4 months they stayed at home, thanks to the parents, we experienced really big problems with school rules since they let them free.*

On the contrary, Teacher Ebru stated that she did not encounter such problems:

*“I was afraid that they would forget the rules of the school, and the order would be disrupted. That never happened. I was most afraid whether we would start over? I never had this problem.”*

Teacher Özlem stated that she encountered the problem of distraction among children during the face-to-face education:

*“The consequence was distraction. As far as I could observe, no child forgot what she or he learned. But they came back very distracted. A child, who could finalize a task, could no longer do it.”*

### **TRT EBA Kindergarten**

Certain participating teachers stated that they employed the TRT EBA Kindergarten programming to support the live classes. Teachers employed in upper socioeconomic level schools stated that they mainly employed online live classes and did not recommend this education channel. Teacher Ayla stated that;

*“We never suggested it. Because they already spent sufficient time on screen.”*

Similarly, Teacher Bensu shared her experiences as follows:

*Because how healthy was it for them to watch it on TV since the classes were already live? Believe me I do not know. Even their interaction with me was questionable. The degree I could access them was debatable. That was why I did not suggest it. They were live in class with me anyway, so they did not have time for that.*

Teacher Emel stated that the parents could not employ this project:

*I sent it to them as well. Stating that TRT EBA kindergarten was available on these hours. But I think it was early around 8 am and 8 pm if I remember correctly. They do not wake up at 8 am anyway. 8pm is dinner time. And then when the father comes home he says ‘give me that remote.’ Therefore, unfortunately, children could not watch TRT EBA kindergarten very much. It did not fit.*

Teacher Nilay stated that she did not know the content of TRT EBA Kindergarten:

*“The district sent the links. We conveyed these to the parents and informed them. But if I say that I know a lot, I would be misleading you.”*

The teachers who employed the TRT EBA Kindergarten stated the following. Teacher Öykü stated that she employed TRT EBA Kindergarten for her professional development:

*...I also used it when preparing the class material. I saw an application there. The days of the week, the date, what will be done on which day? Let us see what we can get. For example, I said today is Monday, January 1st. Actually, there were a lot of stuff for gamification. And it raised the interest of the children more. I started to implement it.*

Teacher Esin stated that she considered TRT EBA kindergarten beneficial:

*Because we only instructed for 20 or 30 minutes 3 days a week... The only aim was to keep in touch with the children. But more was instructed in EBA kindergarten. The children watched different things. They conducted different kinds of activities. I think it was very beneficial.*

Teacher Beril stated that the project was effective especially for children who could not attend pre-school education:

*Even when they could not watch it in the morning, I suggested the parents to make sure the child watched the replay in the evening. Because even a child who does not attend pre-school education had the opportunity to watch it and improve at home. I think this was the most important point.*

### **Parental Participation**

The parental participation data were analyzed in 6 sub-themes. These themes are presented in Table 4.

Table 4  
*Parental participation themes and sub-themes.*

Parental Participation
The Views on Parental Participation
The Factors that Affected Parental Participation
The perspective on preschool education
Socioeconomic level
Technological skills
Number of children
The views on technology
Measures to Improve Parental Participation
Psychological support
Obligation
Organization of parental activities
Providing feedback to the parents
Motivating the parents
Improve the active participation of the fathers

*continued*

---

**Advantages of Parental Participation**

- Recognition of the role and significance of the teacher
- Recognition of the significance of preschool education
- Home-school integration
- Improvement of parent-child communication

---

**Disadvantages of Parental Participation**

- Higher participation in live classes
- Focus on the academic achievement of the child

---

**Parental Participation Activities**

- Suggesting activities that could be conducted at home with the children
  - Suggesting self-care skills activities
  - Playing with the children
  - Designing material with the children
  - Development of parent bulletins
- 

As seen in Table 4, the theme of parental participation included “the views on parental participation”, “the factors that affected parental participation”, “the measures to improve parental participation”, “the advantages of parental participation”, “the disadvantages of parental participation” and “parental participation activities” sub-themes.

### **The Views on Parental Participation**

Independent of the socioeconomic level, all teachers stated that parental participation was higher during the pandemic. Teacher Emel emphasized that communication with parents was important in the process:

*“I was always in contact with the parents. Because naturally, I had to reach the parents first to reach the child.”*

Teacher Beril stated that during the distance education process, parental participation became more important:

*Obviously, school-family cooperation has always been important for me, but it became even more important in distance education. We cannot intervene as easily as the classroom in distance education, or since the class hours were limited, we cannot teach the desired during this time. This is where the parents came into play.*

Although the teachers stated that parental participation was important in the process, they also stated that they sometimes experienced difficulties due to parental involvement. Teacher Öykü described her experiences as follows:

*...Then, the parents left the phone with the child and left. They did not want to stay with the children for a long time. The children sometimes accidentally turned off the phone. I actually asked the parents to remain with them, but some parents avoided that.*

Similarly, Teacher Esin reflected on her experiences as follows:

*"They also move to the highlands in this village, in April or after May. They move to the highlands. There is no telephone or internet connection there. One cannot reach the child or the parents. This was a challenge."*

### **The Factors that Affected Parental Participation**

Several factors affected parental participation in distance education. The most significant factors included parental perspective on preschool education (4), socioeconomic level (4), technology use (3), number of children (3) and the views on technology (2).

Parental perspective on pre-school education was one of the factors that affected parental participation. Teacher Beril stated that parental perspective on preschool education was effective on parental participation:

*"You can estimate that preschool education is valued less villages when compared to Turkey in general. The parents with 2-3 children did never participate. Even when I called them on the phone, most of them did not reply."*

The socioeconomic level of the parents was among the factors that determines parental participation in distance education. Teacher Ayla who was employed at a high socioeconomic level school, stated the following:

*Those with low income did not experience much discontent. What should we do, something like this has happened to us. Their children were a little more relaxed. They did not stress too much. Those with awareness reflected their anxiety and uneasiness on the child a little more. Some received a lot of support.*

Another factor that affected parental participation was the parents' ability to use technology. Teacher Beril stated that parents experienced difficulties in using the Zoom software:

*"Because when I used Zoom, since English was selected as the language and because Turkish was not available in Zoom, families could not participate. They cannot learn how to move forward."*

The number of children in the family was another factor that affected parental participation. Teacher Emel stated that:

*Because it was also difficult. My eldest student was 5 years old. For example, he has 2 younger siblings. On the one hand they try to take care of them, on the other they try to take care of the child's homework.*

Teacher Beril stated that parents' cultural perspective on technology also affected their participation:

*Families could be against such things. Let us just say they do not want the images of men and women to be seen at the same time.” Similarly, Teacher Ebru stated that “because women do not own telephones here. They do not have internet access either. They are against the use of the internet by women.*

### **Measures to Improve Parental Participation**

The teachers stated that they provided psychological support to parents (2), obligated participation (1), planned activities with parents (1), provided feedback to the parents (1), motivated them (1) and increased active participation of the fathers (2) to improve parental participation in distance education.

Teacher Öykü stated that the parents were worried about their involvement in the process in the beginning:

*...but a couple of parents asked whether the face-to-face education was more effective in pre-school education. In that process, we will, and must, do these things in cooperation. Not just because of me, but because of the disease. After explaining these, they had concerns about ‘How will we conduct these activities?’*

Teacher Ayla stated that they provided psychological support due to the anxiety experienced by the parents:

*“We worked with experts on this issue. We constantly told parents not to panic, even for an hour once a week, what to do... or rather what not to do.”*

Teachers developed various strategies to improve parental participation in the process.

Teacher Ebru stated that she obligated parental participation:

*‘Will you do it?’ I said, ‘This should be done.’ Because they will not do it if you only ask them to do it. I said it was obligatory. We said something like this: Those who do not will fail the class due to absenteeism. I said that the child will have to attend the kindergarten again. I said that those who repeat it will be punished. When you log in to the system, the system does not recognize you. That was how they did it.*

Teacher Beril stated that she planned activities that would include the parents:

*I planned them so that the child could not do it alone. These were the activities that must be accompanied by another individual. Most game*

*activities required pairs. For example, in the movement activity, I included movements for two individuals. I tried to include activities for at least 2 people so that at least 1 parent would accompany the child.*

Furthermore, Teacher Öykü stated that she provided parental feedback and the parents were influenced by others and participated more:

*“At first, parents did not respond to the activities I assigned. But then, I got messages from a few parents and I commented on them, and other parents probably felt a bit obliged. All activities started that way.”*

Similarly, Teacher Esin stated that she motivated the parents to ensure parental participation:

*Then, I would sometimes share them in WhatsApp just to keep them motivated. They liked it. Some said, ‘Oh, we could not shoot. I sent it now. Can you share that too?’ I do not normally use such a strategy, but I did that just to motivate them. I shared them on WhatsApp.*

In this process, certain teachers stated that fathers as well as mothers participated in the process. Teacher Esin said:

*“Fathers did not usually read stories to the children. The children began to say: ‘Teacher, my father reads beautiful stories.’ For the first time, they started to say that he started reading stories to them.” Similarly, Teacher Ebru stated that she had more contact with fathers during the process: “But fathers were more interested. They asked about it every day. How is our child in the activities, if he attended today, I will call home if he did not. Thus, we always used the father as a mediator.”*

On the contrary, Teacher Nilay stated that fathers did not really participate in the process:

*There was no father who managed the process. In general, mothers managed the process. I can say that fathers provided some support. But they were in the background. There was no father in the class who was predominant or took on the role of mother.*

She stated that she employed the story-reading activity to involve the fathers in the process:

*“The parents participated since we included them in the routine, the fathers read one fairy tale every night before they went to sleep.”*

## The Advantages of Parental Participation

According to the teachers, the advantages of parental participation in distance education included recognition of the role and significance of the teacher (5), recognition of the significance of pre-school education (2), home-school integration (2) and the improvement of parent-child communication (2).

Teacher Ayla stated that in distance education, parents better understood the role of the teacher:

*“I realized that parents who found a problem in everything actually tried to understand and avoid repeating the problems and were more tolerant towards us.” Teacher Esin stated that “Actually, they told me how difficult it was to be a teacher. They asked, ‘How could you manage all these with 15 children?’ And in fact they became teachers in this process.”*

Certain teachers stated that during the pandemic, parents realized the significance of pre-school education. Teacher Esin stated the following:

*As we kept saying, ‘Let us do this, let us do that,’ and as we called them, they said, ‘I had chores in the garden. I had to go to the field. I had this, I had that.’ It was a little difficult. Certain parents never came. But now, when they conducted one-on-one activities at home, they told themselves children that something was done before at school as well.*

Similarly, Teacher Beril said,

*“I think the pre-school period is better understood, frankly, during the process.”*

Teacher Öykü stated that she ensured home-school cooperation by including the parents in the live classes:

*I sent a message to their mother as well. He should do this and that, that was what I did. If you support, you can do it together with your child and contact me. Always like that, there was always an assignment that would add to the activities I conducted that day.*

Teacher Beril stated that she ensured home-school cooperation with parent bulletins:

*“I reminded them that they should eat our meals on time. The bulletin I mentioned. I note these things on there for parents to ensure that the parents could remind their children.”*

Teacher Bensu stated that the participation of parents in distance education allowed them to learn how to communicate with their children:

*Because sometimes parents come and say, ‘I cannot even get this kid to take medicine.’ I cannot even say something. In fact, we demonstrated*

*that a little bit. Even when we were on the screen, we demonstrated how children listened to us, how we can make them do what we want them to do when we talk to them... We actually demonstrated that.*

### **The Disadvantages of Parental Participation**

According to the teachers, the disadvantages of parental participation included excessive involvement of the parents in the live classes (2) and their focus on the academic development of the child (2).

Teacher Ayla stated that parents were too involved in live classes:

*Sometimes, the child was sitting on the parent's lap, and the parent says, 'Come on, tell me the color. Look, your teacher says this.' We experienced such cases. We really needed the parents in these cases. Because somehow parents were required to support from a distance. Some crossed that line. The parent was like the participant in the activity, the game.*

Similarly, Teacher Beril stated that;

*"When I asked a question, I heard the person next to the child whispering. She told the child the answer. The child cannot speak his mind."*

Teachers argued that certain parents focused more on the academic development of the child during distance education. Teacher Bensu stated the following:

*They want to keep their children busy with something. The activity books or something else... Because I already instruct something, or other teachers already try to instruct something. Although the child sees me 3 times a day in different occasions, I do not know how right it was trying to add something on it.*

Teacher Ayla stated that she proposed certain recommendations to the parents on this approach:

*"Constant reminders so that they do not try to teach something and the children would not be left behind. Relax, we do not miss anything."*

### **Parental Participation Activities**

The teachers stated that they suggested activities that could be conducted at home with children (2), self-care skill activities (1), activities that entail playing games with children and material design (2), and they communicated these suggestions via parent bulletins (1).

Teachers stated that they suggested certain activities that could be conducted with the children at home to the parents and transferred the responsibility to ensure parental participation. Teacher Ayla stated that she suggested a book:

*“We had a book titled colored buttons. You loved this. Let us read this with your parents and narrate it on the screen.”*

Similarly, Teacher Emel mentioned the responsibility she assigned to the parents:

*For example, the mother works in the kitchen, the child is alone in the room. There are things that the child could do in the kitchen, I suggested, for example, we learned how to ferment yogurt without endangering the child. I gave an assignment to ferment yogurt. Let everyone ferment.*

Teacher Ayla stated that they gave the responsibility of the implementation of the educational kits to the parents:

*For example, kits were sent to the homes. The following was noted: ‘These are your supplies. These will be completed today.’ Everything was ready for the tasks that would be completed that day without taking too much time of the parents. Some parents supported this a lot. Some parents not so much.*

Teacher Özlem stated that they suggested activities to improve children's self-care skills:

*Share your life with the children. Give them responsibilities. We also suggested related activities. We sent lists that included several suggestions. That day, sort the peas with your children and let the child set the table. Send us your photos and videos while the child sets the table. Send a photo of the child making the bed.*

Teacher Esin stated that she advised parents to play games with their children:

*“Teacher Tolga had a game guide developed by Tolga Erdogan. I sent sections from this guide. I started sending out simple games for them to play every day.”*

Teacher Öykü suggested that the parents could design materials with their children:

*It is very simple, actually, they can make play dough. I told them, I sent them. This way, what they can do together, then they can work with them during the day and play with dough; it is something very convenient and cheap.*

Teacher Bensu stated that she prepared parent bulletins to send suggestions:

*We have a parent bulletin. What type of activities you can do with your child newsletter. Including activities that could be conducted with paper, scissors, plants, math, and patterns. Everything was written in that bulletin. It was sent to the parents. It was also available online.*

## Teacher

The teacher theme was analyzed based on 2 themes and sub-themes. These themes are presented in Table 5.

Table 5

*Teacher themes and sub-themes.*

Teacher
The positive effects of distance education on the teacher
Personal Development
Active technology use
Creativity
Patience
Productivity
Realization of the love for the profession
Professional Development
Online training
E-Content development
Collaboration with colleagues
The negative effects of distance education on the teacher
Impatience
Dislike of technology
Difficulties in balancing the private and professional life
Negative emotions

As seen in Table 5, two sub-themes were included in the teacher theme, namely the positive and negative effects of distance education on the teacher.

### The Positive Effects of Distance Education on The Teacher

The teachers stated that the process led to personal and professional development.

#### Personal Development

Teachers stated that the pandemic led to active technology use (4), improved creativity (2), they became more patient (1) and active (1) and that they realized that they loved their profession (1). Teacher Esin, who employed technology effectively in this process, stated that she integrated technology into education:

*“I discovered different applications about painters. I found applications that described painters with pictures and music. Now I try to introduce these to the children. I started to include that in the process.”*

Teacher Ebru stated that she became more creative after the adoption of distance education:

*“I discovered what I can do with few materials. In an experiment, I*

*realized that it had a lot of alternatives. Because I had to adapt. It was much more creative for me.”*

Teacher Benu stated that she was more patient after the pandemic:

*Teacher Benu before the pandemic: ‘Come on, you can say that, you know it. I taught you that, I told you about it.’ Teacher Benu after the pandemic: ‘Yes, we did it like this. Do you remember?’ I provided more reminders. That was why it was relaxed.*

Teacher Beril stated that she was more active during the process:

*“Frankly, I think that I was more active in that process. Because we tried to catch up with all the children at different times.”*

Teacher Emel stated that she realized that she loved her profession during distance education:

*“Actually, I realized how much I loved my profession. It could not be conducted at home, one had to be at school. It was necessary to feel the class. I realized how much I loved hugging children.”*

### **Professional Development**

The teachers stated that they received online training during the pandemic, learned to develop e-content, and collaborated more with their colleagues.

Most teachers stated that the distance education, which was adopted during the pandemic, contributed to their professional development. Teacher Ayla stated that:

*...where did we go, where did we attend training when it was actually so difficult to get paid education or training abroad. These were so good. I think we achieved a lot in terms of education. Even when there were not many experts who broadcasted live on Instagram, there were those who broadcasted live like crazy. While others paid a lot, we could watch these for free.*

Teacher Beril stated that she improved her content development skills during distance education:

*“I can honestly say that our activity pool expanded when compared to face- to-face education since we were already disadvantaged when compared to typical classes in content training.” Similarly, Teacher Benu stated the following: “As I said, now I can develop games there. I can draw, I can create stickers for myself. In fact, it was something that the school contributed to us.”*

Teacher Nilay stated that the support of her colleagues contributed to her professional development, and she noticed the areas where she was insufficient during the process:

*“My colleagues helped me a lot. They reached out to several sources and sent these to me. I researched later and realized my deficiencies and said, ‘Oh, were there such things?’ I tried to close the gap slowly.”*

Similarly, Teacher Esin stated that the distance education process contributed to her professional development: “

*Furthermore, how can I be more beneficial for the children, how can I prepare different activities? As I said, I started using various internet sites. I learned to use different software. Frankly, I had to constantly learn something.”*

### **The Negative Effects of Distance Education on The Teacher**

Teachers stated that they were more impatient in distance education (1), developed a dislike for technology (1), experienced difficulties in balancing their private and professional life (1) and experienced negative emotions (3).

Teacher Özlem stated that she was more impatient and intolerant during the process:

*I am more impatient. I am definitely impatient. Yes, I was very patient. I think that staying at home bores, overwhelms the teacher or any individual. I started to want to breathe. I could say I am more impatient. I could say that I am more intolerant. I want to say, ‘Come on, do it,’ but I cannot, I am holding back.*

Teacher Ayla stated that she stayed away from technology during the distance education process:

*“I could not turn on the screen. It is such a burnout. I do not want to see a black screen. In fact, I put my computer bag in my room in January and never took it out.”*

Only Teacher Ayla stated that she experienced difficulties in balancing her private and professional life during distance education:

*Your husband is having a meeting outside on the balcony. Our teenage son is trying to watch EBA in his room, and if it is not bedtime, you have a child next to your feet or a child on your lap who attends a meeting or a children's activity with you. In other words, I could not manage, frankly, this crisis.*

Teacher Özlem reflected her feelings at the beginning of the distance education as follows:

*“Because the future was quite uncertain. We did not know what was going to happen.”*

Similarly, Ayla Teacher stated that she experienced fear and anxiety as a teacher during this period:

*In fact, teachers have anxiety. Because you say that the child is my area of expertise. In a way, I am one-on-one with the child. It is not true when you are on a screen. You are concerned. Could I reach the children on a screen? Could I understand the children on here?*

Teacher Emel stated that the lack of a system for pre-school education at the beginning of the distance education process upset her:

*There was no study on pre-school at first. We tried to manage the process entirely based on our knowledge and experience. What will these live classes be like? They sent an official letter to us much later. It did not arrive at first. It was ignored, obviously. These facts upset us and broke us.*

Teacher Elif stated that the children forgot the things they learned in face-to-face education, and this upset her:

*“...and now the children returned in June, I realized that we were back in the beginning. Frankly, that upset me.”*

It was stated that there were some changes in parental perspectives about the teachers after distance education. Teacher Özlem believed that parental perspectives about the teacher became negative after the distance education process:

*I started to feel bad about this issue, especially as a pre-school teacher. It was the first time that no one understood our job that I love so much, they only saw us as babysitters... Let the schools open, where will we leave our child? Of course, they say this because they work, because they experienced difficulties. But still, there was a lack of mutual understanding, a bit of ‘We paid money, what do we get in return?’ started.*

## **DISCUSSION**

The analysis of the experiences of preschool teachers within the learning and teaching process, which was the first research problem, revealed that teachers informed the children about the pandemic before the live classes started, were active in live classes, and conducted short activities using the materials available at home. Thus, it could be suggested that live classes could be functional in distance education (Yürek, 2021). Furthermore, live classes allow the children to bond with the school and peers (Gülay- Ogelman et al., 2021). This also positively affects the motivation of the children (İnci-Kuzu, 2020) and ensures continuous education (Brown et al., 2020).

Teachers stated that they predominantly included musical, Turkish language, movement and game activities in live classes. The literature review demonstrated that the teachers mostly conducted artistic and gaming (Gülay- Ogelman et al., 2021), storytelling, literacy development activities, song and rhythm exercises, and talked with the children during distance education (Aral & Kadan, 2021). Furthermore, they stated that game-based activities raised the interest of the children (Alper, 2020) and they included drama activities and virtual museum trips to motivate students (Çakın & Külekçi- Akyavuz, 2020). Also, in a study conducted by Akın and Aslan (2021), parents stated that teachers included activities such as painting, finding an object at home, dancing, and coding in live classes. Thus, it could be suggested that teachers attempted to conduct activities that could raise children's interest and activity in distance education.

It has been observed that all participating teachers, independent of the class socioeconomic level, prioritized the social and emotional development of the children and the interaction with peers and teachers during live classes. Çakın and Külekçi-Akyavuz (2020) reported that teachers conducted individual interviews with children, kept the interaction warm, communicated to the children that school was still on, and conveyed messages of longing. In a study by Akkaş-Baysal et al. (2020), parents stated that teachers kept the interaction warm by calling children frequently. Thus, it could be suggested that the social-emotional needs of the children were more important during the pandemic, and the teachers attempted to meet these needs in live classes. The fact that children stated that they missed their friends and teachers was consistent with this finding (Demir- Öztürk et al., 2020). Thus, it was determined that the schools were important since they allowed the children to come together with their friends. Because distance education was inadequate for the social development of children (Akın & Aslan, 2021).

The teachers stated that it was easy to support the cognitive development of the children in distance education, while they also stated that the support for self-care skills and psychomotor development was limited. In particular, they argued that they experienced difficulties in the acquisition and maintenance of self-care and social-emotional skills that require one-on-one interaction. Similarly, in a study by Yürek (2021), academicians and teachers believed that the cognitive development of children was supported during distance education, while the support for their social, emotional and physical development could be limited. The fact that children were quarantined at home during the pandemic led to problems in physical development. In a study conducted by Demir- Öztürk et al. (2020), the children stated that they wanted to go out to the garden and play in the park when the epidemic was over, demonstrating their need of movement. Although the need of each child for movement increased during the pandemic, the participating teachers expressed varying views on the development areas that they supported in distance education.

Teachers stated that they experienced some problems during live courses. They stated that children participation decreased in live courses, they experienced connectivity problems and problems in meeting the individual needs of the children, measurement and evaluation, and classroom management. Especially teachers employed at a low socioeconomic level schools stated that they sometimes experienced difficulties in reaching parents and children. Similarly, in a study by Alper (2020), teachers stated that they experienced difficulties in reaching a few children. Learning problems are higher and inequality of opportunity in education is deeper especially among unreachable children (Avcı & Akdeniz, 2021; Can & Günbayı, 2021).

In distance education, the measurement-evaluation process was neglected. Literature review revealed that certain studies reported limited measurement and evaluation in distance education, and the child development could only be determined with the support of parents (Arslan & Şumuer, 2020; Alper, 2020; Çakın & Külekçi-Akyavuz, 2020; Yürek, 2021). Measurement and evaluation in distance education is at an important issue since it determines the quality of the education. Thus, it was observed that the focus was on the analysis of the outcome, neglecting the evaluation of the process (Daşçı- Sönmez & Cemaloğlu, 2021).

The participating teachers stated that they were not satisfied with the short class hours in EBA preschool programming in distance education. In a study by Demir and Özdaş (2020), teachers stated that the duration of live courses should be increased. In a study conducted by İnci-Kuzu (2020) on primary school students, 15% of the parents stated that class hours should be longer. Although the EBA class hours should be short due to the developmental traits of the children, this challenged the classroom management skills of the teachers in ensuring the student interest, and initiation and sustenance of class activities. In a study by Metin et al. (2021), teachers stated that distance education was not productive for teachers, students and the courses, and they experienced difficulties in classroom management. It was a remarkable finding that especially teachers employed in low and high income schools stated that they experienced communication problems with bilingual children. Thus, it could be suggested that teachers required support to develop their classroom management skills in distance education.

All participating teachers stated that they preferred face-to-face education in pre-school education. The idea that face-to-face education is more effective when compared to distance education was also reported by other studies in the literature (Kurnaz et al., 2020; Mocoşoğlu & Kaya, 2020; Özdoğan & Berkant, 2020; Tunçeli, 2022). In a study by Dong et al. (2020) Chinese parents stated that online learning was not adequate in preschool education due to underdeveloped self-regulation skills of the children and unavailability of adequate equipment for the parents. In the study, although the teachers stated that they believed that distance education could be conducted in pre-school education during the pandemic, they also argued that distance education was not as effective as face-to-face education. When the face-to-face education was reinitiated, the teachers had to repeat the concepts and skills they covered in distance education and the children needed to move excessively, were distracted, and had forgotten the school rules. Similarly, in a study by Gülay-Ogelman, et al. (2021) teachers stated that children experienced problems such as adaptation to school, forgetting learned information, and non-adherence to school rules. Thus, the views about distance education were controversial with respect to its applicability due to the age and developmental levels of preschool children, even though it provided a different perspective for preschool teachers.

Certain teachers stated that they did not have enough information about the TRT EBA Kindergarten, which was introduced with distance education, and the parents could not watch the programming since the hours were early or late, while other teachers considered the project beneficial especially for children who could not attend pre-school education and stated that it contributed to their professional development. It was observed that teachers employed in low- income schools recommended the parents to use the project, while the teachers employed in high income schools stated that they did not recommend the project since children were already exposed to too much technology. While there is no study on the TRT EBA Kindergarten project in the literature, certain studies stressed that the EBA pre-school content should be improved (Akkaş-Baysal et al., 2020; Balaban & Hanbay-Tiryaki, 2021).

Thus, preschool teachers and parents could be informed about the TRT EBA Kindergarten project to allow active use of the children.

The analysis of the views of preschool teachers on parental participation, the second research problem, revealed that the vast majority of the teachers stated that the significance of parental participation in preschool education was better recognized during the distance education process. Similar views were reported in other studies in the literature (Akın & Aslan, 2021; Aykar & Yurdakal, 2021; Baz, 2021; Gündoğdu, 2021). Particular parental involvement is very important for holistic development of the child (Bartolome et al., 2020). Furthermore, the teachers stated that fathers also participated in the process. The rare participation of fathers was a welcomed development in pre-school education. In contrast, the studies conducted by Hapsari et al. (2020) and Novianti and Garzia (2020) reported that mostly mothers were involved in learning activities at home. The teachers stated that parents' knowledge and awareness about the significance of pre-school education and the role of the teacher improved. In a study conducted by Garcia (2020), it was reported that after the pandemic, both parents and students respected teachers more. Similarly, in a study conducted by Aral and Kadan (2021) with preschool teachers, the participants stated that the significance of the teacher increased after distance education. Thus, it could be suggested that the pandemic had a positive impact on pre-school education. However, teachers employed at low- and middle-income schools stated that parents prioritized the participation of older children in online classes. A similar result was reported by Avcı and Akdeniz (2021), the preschool teacher who participated in the study argued that parents did not prioritize the preschool education when compared to other education levels.

The participating teachers stated that they suggested various activities such as material development, playing games, and assignment of domestic chores to the child to ensure parental participation. In a study by Çakın and Külekçi-Akyavuz (2020), teachers stated that they sent brochures about distance education for primary school students to the parents and activities they could conduct at home with their children. During the pandemic, it was observed that parent-child interaction improved since the children stayed at home for a long time, and parents played games with their children and allowed the children to participate in kitchen chores (Aral & Kadan, 2021; Özyürek & Çetinkaya, 2021). In contrast, in the study conducted by Yoleri (2022), the effects of the pandemic on parents it has been stated that it increases burnout on. Similarly in a study by Erol and Erol (2020), parents stated that children became more active in education; however, but they could not provide adequate childcare and experienced difficulties in the management of the learning process. In particular, teachers employed in low- and middle- income schools stated that they sometimes they experienced difficulties in ensuring the participation of the parents in the study.

The findings demonstrated that various factors such as parental views on preschool education, socioeconomic level, technology skills, and number of children affected parental participation in distance education. Literature review revealed that factors such as frequent infrastructural and connectivity problems (Aral & Kadan, 2021; Arslan & Şumuer, 2020; Aykar & Yurdakal, 2021; Avcı & Akdeniz, 2021; Başaran et al., 2020; Çakın & Külekçi-Akyavuz, 2020; Demir & Özdaş, 2020; Kabapınar, et al., 2021), hardware problems (Arslan & Şumuer, 2020), high number of siblings (Başaran et al., 2020; Kabapınar et al., 2021; Kuş et al., 2021), early class hours (Basaran et al., 2020), and inadequate parental participation (Aral & Kadan, 2021; Avcı & Akdeniz, 2021; Çakın & Külekçi- Akyavuz, 2020; Kabapınar, et al., 2021; Kuş et al., 2021) affected the unattendance in live classes. Furthermore, Teachers Beril and Ebru, who were employed in low income schools, added that in the region where they worked, the employment of technological tools by women was not considered appropriate

culturally. Thus, it could be suggested that the socio-cultural features of the region affected the participation of children in distance education.

The participating teachers stated that parents experienced anxiety about distance education, and they counseled the parents in coping with these concerns, they planned activities to include the parents in the educational process, they suggested activities that the parents could conduct at home with their children, and they encouraged other parents to participate via feedback. Especially, the teachers who were employed in low-income schools stated that parents experienced problems in comprehending and using software such as Zoom, and they did not own the technological devices required to participate in the courses. In a study by Konca and Çakır (2021), parents stated that they experienced problems since Zoom software was not available in Turkish. The participating teachers stated that they communicated more frequently with the parents who could not use Zoom via social media such as WhatsApp. Literature review demonstrated that teachers mostly communicated with the students on WhatsApp and phone (Alper, 2020; Gündoğdu, 2021; Hartatik & Fulka-Bia'yuni, 2020; Konca & Çakır, 2021; Novianti & Garzia, 2020). However, in a study conducted by Aral and Kadan (2021) with preschool teachers, it was reported that teachers mostly employed the EBA platform in distance education, followed by Zoom and WhatsApp applications. Thus, it was observed that teachers communicated with parents on various channels based on the availability of the infrastructure and technological equipment, underlining the significance of the technological skills of the parents.

Distance education in preschool education led to emotions such as sadness and anxiety among the teachers. In a study conducted by Çiçek et al. (2020) it was observed that female teachers experienced depression and anxiety more when compared to male teachers. During the pandemic, it was determined that the burnout levels of the teachers increased, their flexibility skills should be improved, and their internal motivation should be preserved (Fidan, 2021). Especially as stated by Teacher Emel, the lack of readiness for online pre-school education at the beginning of the pandemic both upset and worried the teachers. The reports in a study by Akkaş-Baysal et al. (2020) that distance education was conducted on EBA TV and with the individual efforts of preschool teachers and parents was consistent with the teacher views.

High exposure to technology and technological devices for a long time during the pandemic led to antipathy towards technology among the teachers, as well as certain advantages such as the integration of technology into education, improvement of technological competency of teachers, and more creative activities. Fidan (2021) reported that the pandemic improved the beliefs of the teachers on technology. Because, it is known that the majority of teachers did not have any online education experience (Avcı & Akdeniz, 2021) and teachers with high techno-pedagogical skills were more successful in the process (Alqahtani & Rajkhan, 2020). Thus, distance education created an opportunity for teachers to keep up with the advances and improve their professional competencies. It was reported that the teachers cooperated with their colleagues, attended various courses and employed Web 2.0 tools to develop their professional skills in distance education (Akın & Aslan, 2021; Alper, 2020; Aral & Kadan, 2021; Avcı & Akdeniz, 2021).

## **CONCLUSION**

In conclusion, the teacher experiences differentiated in certain issues and were similar in others based on the differences between the institutions they were employed and between the income levels of the students attending these institutions. Since kindergartens and village schools continued face-to-face education during the pandemic, the teachers employed in these schools utilized distance education only during total quarantine periods. This led to differences between teacher perspectives and experiences on distance education. Similarly, in a study by Alea et al. (2020) it was reported that whether the teachers were employed in urban or rural schools affected their views on distance education. In a study conducted by Kurnaz et al. (2020), it was observed that teachers employed in private schools had more positive views on distance education when compared to the teachers employed in public schools. This could be due to the fact that private schools were not limited to MEB applications and offered in-service training for the teachers. Although private schools employed different education portals in distance education, this diversity was not available in the public schools (Yıldız & Akar- Vural, 2020; Yalman- Polatlar & Bayram-Tuncay, 2020). This further exacerbated the inequality of opportunity in education.

As reported in the UNICEF (2020) report, at least 463 million children worldwide did not have access to distance education during the Covid-19 pandemic. Since the preschool children without access to education have lower independent study skills when compared to children in other education levels, their losses in learning were higher (TEDMEM, 2020). Thus, social states should adopt various measures and plans in distance education for should emergency situations such as the Covid 19 pandemic.

Based on current research results, the following can be recommended; in-service training could be organized for preschool teachers on the development digital content based on the individual needs of the children. A preschool activity pool for distance education could be developed. Courses on digital content production and digital literacy could be added to Preschool Education Undergraduate Program. Training could be organized to improve the technological skills of the parents. Moreover, distance education programs for all education levels could be developed for the parents. The internet infrastructure could be improved to ensure effective distance education. Technological equipment such as computers and internet could be provided by the ministries and non-governmental organization for low-income children based on their individual needs. Information on EBA TV Kindergarten project and its content could be provided for preschool teachers, and the broadcast hours of the program could be increased.

## **DECLARATIONS**

### **Consent to Participate**

All participants were informed about the study and their consent was obtained, following the ethical rules.

## ACKNOWLEDGEMENT

The authors would like to thank all participants who voluntarily took part in the study and shared their time and experiences. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## CONFLICTS OF INTEREST

There is no any conflict of interest in this study.

## AUTHOR CONTRIBUTIONS

The author was responsible for the conception and design of the study, data collection, data analysis, interpretation of the findings, and preparation of the manuscript.

## DECLARATION OF GENERATIVE AI USE

No generative artificial intelligence (AI) tools were used in the design, data collection, analysis, interpretation of the findings, or writing of this manuscript.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the author upon reasonable request.

## REFERENCES

- AA. (2020). *Okul Öncesinde Milli Eğitim Müdürlüklerince Uzaktan Eğitime Geçme Kararı Alınabilecek*. <https://www.aa.com.tr/tr/egitim/okul-oncesinde-milli-egitim-mudurluklerince-uzaktan-egitime-gecme-karari-alinabilecek/2058318>
- Akın, F. & Aslan, N. (2021). Covid 19 pandemisinde okul öncesi dönemdeki öğrencilerin uzaktan eğitimi: Bir eylem araştırması. [Distance education of pre-school students during the covid-19 pandemic: An action research.] *Alanyazın Eğitim Bilimleri Eleştirel İnceleme Dergisi*, 2(1), 7-14. <http://dx.doi.org/10.22596/cresjournal.0201.7.14>
- Akkaş- Baysal, E., Ocak, G. & Ocak, İ. (2020). Covid-19 salgını sürecinde okul öncesi çocuklarının EBA ve diğer uzaktan eğitim faaliyetlerine ilişkin ebeveyn görüşleri. [Parents' views of preschool children on eba and other distance education activities during the covid-19 outbreak.] *Uluslararası Sosyal Bilimler Dergisi Eğitimi Dergisi*, 6(2), 185-214. <https://doi.org/10.47615/issej.835211>
- Alea, L. A., Fabrea, M. F., Roldan, R. D. A. & Farooqi, A. Z. (2020). Teachers' Covid-19 awareness, distance learning education experiences and perceptions towards institutional readiness and challenges. *International Journal of Learning, Teaching and Educational Research*, 19(6), 127-144. <https://doi.org/10.26803/ijlter.19.6.8>
- Alper, A. (2020). Pandemi sürecinde K-12 düzeyinde uzaktan eğitim: Durum çalışması. [K-12 distance education in the pandemic process: A case study]. *Milli Eğitim Dergisi*, 49(1), 45-67. <https://doi.org/10.37669/milliegitim.787735>
- Alqahtani, A. Y. & Rajkhan, A. A. (2020). E-learning critical success factors during the Covid-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Education Sciences*, 10(9), 216-231.
- Aral, N. & Kadan, G. (2021). Pandemi sürecinde okul öncesi öğretmenlerinin yaşadıkları problemlerin incelenmesi. [Investigation of preschool teachers' problems in the pandemic process.] *Kırşehir Ahi Evran Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 1(2), 99-114.
- Arslan, Y. & Şumuer, E. (2020). Covid-19 döneminde sanal sınıflarda öğretmenlerin karşılaştıkları sınıf yönetimi sorunları. [Classroom management problems encountered by teachers in virtual classes during covid-19 pandemic]. *Milli Eğitim Dergisi*, 49(1), 201-230. <https://doi.org/10.37669/milliegitim.791453>

- Aykar, A. N. & Yurdakal, İ. H. (2021). Erken çocukluk öğretmenlerinin acil uzaktan eğitime ilişkin görüşleri. [Early childhood teachers views on emergency remote teaching (ERT)]. *Temel Eğitim Dergisi*, 3(2), 6-14. <https://doi.org/10.52105/temelegitim.3.2.1>
- Avcı, F. & Akdeniz, E. C. (2021). Koronavirüs (Covid-19) salgını ve uzaktan eğitim sürecinde karşılaşılan sorunlar konusunda öğretmenlerin değerlendirmeleri. [Assessment of teachers on the covid-19 epidemic and problems encountered in distance learning process]. *Uluslararası Sosyal Bilimler ve Eğitim Dergisi*, 3(4), 117-154. <https://dergipark.org.tr/pub/usbed>
- Balaban, F. & Hanbay- Tiryaki, S. (2021). Corona virüs (covid-19) nedeniyle mecburi yürütülen uzaktan eğitim hakkında öğretmen görüşleri. [The opinions of teachers about compulsory distance education due to corona virus (covid-19)]. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 10(1), 52-84. <https://doi.org/10.15869/itobiad.769798>
- Balcı, A. (2020). Covid-19 özelinde salgınların eğitime etkileri. [In covid-19 special the effect of pandemics on education ]. *Uluslararası Liderlik Çalışmaları Dergisi: Kuram ve Uygulama*, 3(3), 75-85. Bartolome, M., Mamat, N. & Masnan, A.H. (2022). Exploring kindergarten teachers' perspectives in parental involvement in the Philippines. *Southeast Asia Early Childhood Journal*, 9(1), 44-58. <https://ejournal.upsi.edu.my/index.php/SAECJ/article/view/3331>
- Baş, T. & Akturan, U. (2017). *Sosyal bilimlerde bilgisayar destekli nitel araştırma yöntemleri [Computer-assisted qualitative research methods in social sciences]*. Seçkin Publishing.
- Başaran, M. Doğan, E., Karaoğlu, E. & Şahin, E. (2020). Koronavirüs (covid-19) pandemi sürecinin getirisi olan uzaktan eğitimin etkililiği üzerine bir çalışma. [A study on effectiveness of distance education, as a return of coronavirus (Covid-19) pandemic process]. *AJER -Journal of Educational Research* ,5(2), 368-397.
- Baz, B. (2021). COVID-19 salgını sürecinde öğrencilerin olası öğrenme kayıpları üzerine bir değerlendirme. [An evaluation on possible learning losses of students during the Covid-19 pandemic]. *Temel Eğitim Dergisi* (1), 6-19. <https://doi.org/10.52105/temelegitim.3.1.3>
- Bjorkdahl, K. & Carlsen, B. (2019). *Pandemics, publics and politics*. Palgrave Pivot.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N. & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395, (10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Brown, N., Riele, K. Shelley, B. & Woodroffe, J. (2020). *Learning at home during COVID-19: Effects on vulnerable young Australians*. [https://www.utas.edu.au/\\_data/assets/pdf\\_file/0008/1324268/Learning-at-home-during-COVID-19-updated.pdf](https://www.utas.edu.au/_data/assets/pdf_file/0008/1324268/Learning-at-home-during-COVID-19-updated.pdf)
- Can, E. (2020). Koronavirüs (Covid-19) pandemisi ve pedagojik yansımaları: Türkiye’de açık ve uzaktan eğitim uygulamaları. [Coronavirüs (Covid-19) pandemic and pedagogical implications: In Turkey open and distance education applications]. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 6(2), 11-53.
- Can, E. & Günbayı, İ. (2021). Covid-19 pandemi sürecinde eğitim bilişim ağı (EBA) üzerinden gerçekleştirilen uzaktan eğitim uygulamasına ilişkin ilköğretim yöneticisi ve öğretmenlerinin görüşleri. [Opinions of primary school administrators and teachers on the distance education application conducted over the education information network (EBA) during the covid-19 pandemic process]. *Akademik Sosyal Araştırmalar Dergisi*, 5(16), 279-303. <https://doi.org/10.31455/asya.885885>
- Creswell, J. (2014). Qualitative methods. S.B. Demir (Eds.). *The research design is within the qualitative, quantitative and mixed method approaches* (pp. 183-213). Eğiten Publishing.
- Çakın, M. & Külekçi-Akyavuz, E. (2020). Covid-19 süreci ve eğitime yansısı: Öğretmen görüşlerinin incelenmesi. [The Covid-19 process and its reflection on education: An analysis on teachers' opinions]. *International Journal of Social Sciences and Education Research*, 6(2), 165-186. <https://dergipark.org.tr/pub/ijsser>
- Çiçek, İ., Tanhan, A. & Tanrıverdi, S. (2020). Covid-19 ve eğitim. [Covid-19 and education]. *Milli Eğitim Dergisi*, 49(1), 1091-1104. <https://doi.org/10.37669/milliegitim.787736>
- Daşçı- Sönmez, E. & Cemaloğlu, N. (2021). Okullaşma sürecinde uzaktan evde eğitime geçiş. [Transition to distance home education in the schooling process]. *İnsan&İnsan*, 8(27), 63-82. <https://doi.org/10.29224/insanveinsan.799402>
- Demir, F. & Özdaş, F. (2020). Covid-19 sürecindeki uzaktan eğitime ilişkin öğretmen görüşlerinin incelenmesi. [Examining teachers' opinions related to distance education in the Covid-19 process]. *Milli Eğitim Dergisi*, 49(1), 273-292. <https://doi.org/10.37669/milliegitim.775620>
- Demir- Öztürk, E., Kuru, G. & Demir- Yıldız, C. (2020). COVID-19 pandemi günlerinde anneler ne düşünür çocuklar ne ister? Anne ve çocuklarının pandemi algısı. [What do mothers think and what do children want during Covid-19 pandemic days?: Perceptions of mothers and their children related to pandemic]. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 204-220. <https://dergipark.org.tr/pub/asead/issue/54658/733406>

- Dong, C., Cao, S. & Li, H. (2020). Young children's online learning during COVID19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118, 1-9. <https://doi.org/10.1016/j.chilyouth.2020.105440>
- Elitaş, T. (2017). *Uzaktan eğitim lisans sürecinde yeni iletişim teknolojileri: Atatürk Üniversitesi uzaktan eğitim merkezi*. [New communication technologies in distance education license period: Atatürk University distance education center]. [Doctoral dissertation, Marmara University]. <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Erol, M. & Erol, A. (2020). Koronavirüs pandemisi sürecinde ebeveynleri gözünden ilkökul öğrencileri. [Primary school students through the eyes of their parents during Covid-19 pandemic]. *Milli Eğitim Dergisi*, 49(1), 529-551. <https://doi.org/10.37669/milliegitim.766194>
- Fidan, M. (2021). Covid- 19 pandemisinde öğretmenlik. [Teaching profession during the Covid-19 pandemic]. *Uluslararası Eğitim Bilimleri Dergisi*, 5(1), 1-14 <https://doi.org/10.46762/mamulebd.789097>
- Garcia, E. (2020). *The pandemic sparked more appreciation for teachers, but will it give them a voice in education and their working conditions?* <https://www.epi.org/blog/the-pandemic-sparked-more-appreciation-for-teachers-but-will-it-give-them-a-voice-in-education-and-their-working-conditions/>
- Gündoğdu, S. (2021). Okul öncesi öğretmenlerinin uzaktan eğitim sürecinde uyguladıkları aile katılım çalışmalarının incelenmesi. [Investigation of the family participation activities which pre-school teachers apply in the distance education process]. *OPUS-Uluslararası Toplum Araştırmaları Dergisi*, 17(35),1849-1874. <https://doi.org/10.26466/opus.827530>
- Gülay-Ogelman, H., Güngör, H. & Göktaş, İ. (2021). Covid-19 ve yeni dönemdeki okula uyum süreci: Okul öncesi eğitimi öğretmenlerinin görüşlerinin incelenmesi. [Covid-19 and the school adjustment process in the new term: An investigation into preschool education teachers' views]. *International Journal of New Trends in Arts, Sports & Science Education (IJTASE)*, 10(1), 11-24. <https://www.ijtase.net/index.php/ijtase/article/view/24/25>
- Hapsari, S. M., Sugito, S. & Fauziah, P. Y. (2020). Parent's involvement in early childhood education during the covid-19 pandemic period. *Jurnal Pendidikan Progresif*, 10(2), 298-311. <https://doi.org/10.23960/jpp.v10.i2.202014>
- Hartatik, S. & Fulka Bia'yuni, A. (2020). The teaching and learning practice performed by pre-school teachers during Covid 19 outbreak. *Journey Journal of English Language and Pedagogy*, 3(2), 89-94. <https://doi.org/10.33503/journey.v3i2.1016>
- Hodges, C., Moore, S., Locke, B., Trust, T. & Bond, A. (2020). *The difference between emergency remote teaching and online learning*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Hürriyet. (2020). *TRT EBA Anaokulu başladı*. <https://www.hurriyet.com.tr/gundem/trt-eba-anaokulu-basladi-41697396>
- İlgin, H.Ö. & Ulupınar, Ş. C. (2021). Kamu hizmet aracı olarak web sitelerinin kullanılabilirliği: EBA örneği. [Usability of websites as a public service tool: EBA example]. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, 17(37), 4156-4180. <https://doi.org/10.26466/opus.860386>
- İnan, H. Z. (2020). Covid-19 pandemi sürecinde okul öncesi eğitimin yeniden yapılandırılması. [Restructuring early childhood education during the Covid-19 pandemic]. *Milli Eğitim Dergisi*, 49(1), 831-849. <https://doi.org/10.37669/milliegitim.754307>
- İnci- Kuzu, Ç. (2020). Covid-19 pandemisi sürecinde uygulanan ilkökul uzaktan eğitim programı (EBA TV) ile ilgili veli görüşleri. [The views of the parents on primary school distance education program (EBA TV) implemented during the Covid-19 pandemic]. *Milli Eğitim Dergisi*, 49(1), 505-527. <https://doi.org/10.37669/milliegitim.720556>
- Kabapınar, Y., Kanyılmaz, B.M., Ören- Koçhan, N. & Atik, U. (2021). Öğretmen ve velilerin gözünden öğrencilerin uzaktan eğitime katılımlarının öyküleri: Uzaktan eğitim mi, uzakta kalan eğitim mi?. [The stories of students' participation in distance education from the perspective of teachers and parents: "Distance education or distant education?]. *Temel Eğitim Araştırmaları Dergisi*, 1(1), 79-98. <https://doi.org/10.29228/mutead.6>
- Kim, J. (2020). Learning and teaching online during COVID 19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood*, 52, 145-158. <https://doi.org/10.1007/s13158-020-00272-6>
- Konca, A.S. & Çakır, T. (2021). Pandemi sürecinde uzaktan eğitim ile okul öncesi eğitimden ilkökula geçiş hakkında veli görüşleri. [Investigation of parents' views on distance education of children's transition from preschool education to primary school during the pandemic process]. *Yaşadıkça Eğitim*, (2), 520-545. <https://doi.org/10.33308/26674874.2021352307>
- Kurnaz, A., Kaynar, H., Şentürk- Barışık, C. & Doğrukök, B. (2020). Öğretmenlerin uzaktan eğitime ilişkin görüşleri. [Teachers' views on distance learning]. *Milli Eğitim Dergisi*, 49(1), 293-322. <https://doi.org/10.37669/milliegitim.787959>

- Kuş, Z., Mert, H. & Boyraz, F. (2021). Covid-19 salgını süresince eğitimde fırsat eşit(siz)liği: Kırsal kesimdeki öğretmen ve ebeveyn görüşleri. [Equality of opportunity during the ongoing covid-19 pandemic: Teachers' and parents' views in the rural section]. *Eğitim Teknolojisi Kuram ve Uygulama Dergisi*, 11(2), 470-493. <https://doi.org/10.17943/etku.913684>.
- Metin, M., Gürbey, S. & Çevik, A. (2021). Covid-19 pandemi sürecinde uzaktan eğitime yönelik öğretmen görüşleri. [Teacher opinions on distance education in Covid-19 pandemic]. *Maarif Mektepleri Uluslararası Eğitim Bilimleri Dergisi*, 5(1), 66-89. <https://doi.org/10.46762/mamulebd.881284>
- MEB. (2016). *Fatih projesinde neler yapıldı?* <http://fatihprojesi.meb.gov.tr/>
- MEB. (2020a). Bakan Selçuk, Koronavirüs'e karşı eğitim alanında alınan tedbirleri açıkladı. <https://www.meb.gov.tr/bakan-selcuk-koronaviruse-karsi-egitim-alaninda-alinan-tedbirleri-acikladi/haber/20497/tr>
- MEB. (2020b). Türkiye uzaktan eğitim istatistikleriyle dijital dünyanın listelerini zorladı. <http://www.meb.gov.tr/turkiye-uzaktan-egitim-istatistikleriyle-dijital-dunyanin-listelerini-zorladi/haber/21158/tr>
- Merriam, S. (2015). *A guide to qualitative research design and practice*. (Translated: S. Turan). Nobel Publishing.
- Moçoşoğlu, B. & Kaya, A. (2020). Koronavirüs hastalığı (COVID-19) sebebiyle uygulanan uzaktan eğitime yönelik öğretmen tutumlarının incelenmesi. [Investigation of teachers' attitudes towards distance education applied due to coronavirus disease (COVID-19)]. *Kahramanmaraş Sütçü İmam Üniversitesi Eğitim Dergisi*, 2(1), 15-43. <https://dergipark.org.tr/tr/pub/ksued/issue/59531/800151>
- Novianti, R. & Garzia, M. (2020). Parental engagement in children's online learning during Covid-19 pandemic. *Journal of Teaching and Learning in Elementary Education*, 3(2), 117-131. <http://dx.doi.org/10.33578/jtlee.v3i2.7845>
- Özdoğan, A.Ç. & Berkant, H.G. (2020). Covid-19 pandemi dönemindeki uzaktan eğitime ilişkin paydaş görüşlerinin incelenmesi. [The examination of stakeholders' opinions on distance education during the Covid-19 epidemic]. *Milli Eğitim Dergisi*, 49(1), 13-43. <https://doi.org/10.37669/milliegitim.788118>
- Özdoğru, M. (2021). Covid-19 sürecinde değişen veli rolleri. [Changing parent roles in the covid-19 process]. *Uluslararası Güncel Eğitim Araştırmaları Dergisi (UGEAD)*, 7(1), 35-50. <https://dergipark.org.tr/tr/pub/intjces/issue/64208/939691>
- Öztürk, B. & Çetinkaya, A. (2021). Pandemi döneminde bir eğitim aracı olarak televizyon: TRT EBA TV. [Television as a educational tool in the pandemic: TRT EBA TV]. *İNİF E-Dergi*, 6(1), 140-162. <https://doi.org/10.47107/inifedergi.886813>
- Özyürek, A. & Çetinkaya, A. (2021). Covid-19 pandemi döneminde aile ve ebeveyn-çocuk ilişkilerinin incelenmesi. [The examination of family and parent-child relationships during COVID-19 Pandemic]. *Çağ Üniversitesi Sosyal Bilimler Dergisi*, 18(1), 96-106. <https://dergipark.org.tr/cagsbd>
- Sözen, N. (2020). Covid 19 sürecinde uzaktan eğitim uygulamaları üzerine bir inceleme. [An investigation on distance education applications in the Covid 19 process]. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi (ASEAD)*, 7(12), 302-319. <https://dergipark.org.tr/tr/pub/asead/issue/58844/821764>
- TEDMEM. (2020). *Okulları yeniden açmak: Ne zaman, kim için ve nasıl?*. Retrieved 7 October 2020 from: <https://tedmem.org/covid-19/okullari-yeniden-acmak-ne-zaman-kim-icin-nasil>
- Tunçeli, H. İ. (2022). 36-72-month-old children mothers' views about Covid-19 pandemic. *Southeast Asia Early Childhood Journal*, 11(1), 145-158. <http://ejournal.upsi.edu.my/index.php/SAECJ>
- UNICEF. (2020). *Çocukların en az üçte biri uzaktan eğitime katılmıyor*. [https://www.unicef.org/yazi/koronavirus\\_egitimeerisim?gclid=CjwKCAjwtfqKBhBoEiwAZuesiDVzOerIS\\_nanhAnW2wE5NPQW07Iqs3zP27swzk21sm5KhVd4jEdERoCoC0QAvD\\_BwE](https://www.unicef.org/yazi/koronavirus_egitimeerisim?gclid=CjwKCAjwtfqKBhBoEiwAZuesiDVzOerIS_nanhAnW2wE5NPQW07Iqs3zP27swzk21sm5KhVd4jEdERoCoC0QAvD_BwE)
- Yalman-Polatlar, D. & Bayram-Tuncay, E. (2020). Pandemi sürecinde okul öncesi öğretmenlerinin mesleğe dair görüşlerinin incelenmesi. [In pandemic process pre school teachers about the profession opinions investigate]. (Summary). F. Meriçli & A. Movlyanov (Eds.), *World Children Conference Proceedings Book by Iksad Publishing House* in (pp.296-297). Türkiye: Ankara, 23-25 October 2020.
- Yıldız, A. & Akar-Vural, R. (2020). COVID-19 pandemisi ve derinleşen eğitim eşitsizlikleri. [COVID-19 pandemic and deepening education inequalities]. Turkish Medical Association Covid 19 Pandemic 6th month evaluation report.
- Yıldırım, A. & Şimşek, H. (2016). *Sosyal bilimlerde nitel araştırma yöntemleri*. (10. baskı). [Qualitative research methods in the social sciences]. (10th. edition)]. Seçkin Publishing.
- Yıldırım, A. & Şimşek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri*. (11. baskı). [Qualitative research methods in the social sciences]. (11th Edition). Seçkin Publishing.
- Yılmaz, E., Mutlu, H., Güner, B., Doğanay, G. & Yılmaz, D. (2020). *Veli algısına göre pandemi dönemi uzaktan eğitimin niteliği*. [The quality of distance education in the pandemic period according to parent perception]. Palet Publishing.

- Yoleri, S. (2022). Parental burnout: Effect of home quarantine during the Covid-19 pandemic. *Southeast Asia Early Childhood Journal*, 11 (2), 73-86. <https://doi.org/10.37134/saecj.vol11.2.5.2022>
- Yürek, E. (2021). *Okul öncesi eğitimde uzaktan eğitimin uygulanabilirliğine yönelik okul öncesi öğretmenlerinin ve alandaki akademisyenlerin görüşlerinin incelenmesi*. [Analysis of preschool teachers and scholars opinions regarding the applicability of distance education in preschool education]. [Master Thesis, Fatih Sultan Mehmet Foundation University]. <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Zhong, R. (2020). The coronavirus exposes education's digital divide. [nytimes.com:https://www.nytimes.com/2020/03/17/technology/china-schools-coronavirus.html](https://www.nytimes.com/2020/03/17/technology/china-schools-coronavirus.html)