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Research Article

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Experiences of Parents on the Virtual Education Process of Primary School Children with Special Needs in Inclusive Education

Meral MELEKOĞLU a^* , Zekiye TUNÇ b , Havva PAMUK c , Müge ŞEN d , Ömer Faruk AR e ,

a Assist. Prof., Eskişehir Osmangazi University, https://orcid.org/0000-0003-4349-9959 *meralmelekoglu@gmail.com

b Doctoral Student, Eskişehir Osmangazi University, https://orcid.org/0000-0002-9966-2922

c Doctoral Student, Eskişehir Osmangazi University, https://orcid.org/0000-0001-7653-7582

d Doctoral Student, Eskişehir Osmangazi University, https://orcid.org/0000-0002-5075-8691

e Doctoral Student, Necmettin Erbakan University, https://orcid.org/0000-0002-4211-2962

Abstract

Due to the COVID-19 pandemic seen around the world, most of countries have decided to conduct their education activities virtually. This situation affected parents and children in different ways depending on the socio-economic and socio-demographic structure of families in each country. This research aims to investigate deeply the experiences of parents of children with special needs attending inclusive education in Türkiye and the problems of parents and the solutions for the problems in the virtual education process at home during the COVID-19 pandemic.

This study is a qualitative research and the data were collected in-person in 2021 via an individual semi-structured interview and analyzed with content analysis. The results showed that parents with better socio-economic levels had positive experiences in providing appropriate education for their children, while others had many problems in the process. In particular, parents' expectations from teachers are cooperation and communication, and follow-up and guidance regarding their children.

The results showed that even though COVID-19 is over, the earthquake in 2023 and other possible health problems in Türkiye show that the subject of virtual education should be discussed in detail and the necessary education action plans should be prepared for disasters for individuals with special needs.

Keywords: COVID-19, distance/virtual education, disability, inclusion/inclusive, parents, pandemic, special needs

Bütünleştirme Eğitimine Devam Eden Özel Gereksinimli İlkokul Çocuklarının Çevrimiçi Eğitim Sürecine İlişkin Ebeveynlerin Deneyimleri

Öz

Dünya'da görülen COVID-19 pandemisine bağlı olarak tüm ülkeler, eğitim faaliyetlerini uzaktan yürütme kararı almıştır. Bu durum, ailelerin sosyo-ekonomik ve sosyo-demografik yapısına bağlı olarak ebeveynleri ve çocukları her ülkede farklı şekillerde etkilemiştir. Bu araştırmanın amacı, Türkiye'de bütünleştirme eğitimine devam eden özel gereksinimli çocukların ebeveynlerinin COVID-19 pandemi döneminde uzaktan eğitim sürecine ilişkin deneyimlerini, süreçte yaşadıkları sorunları ve sorunlara ilişkin başvurdukları çözüm yollarını derinlemesine araştırmaktır.

Bu çalışma nitel bir araştırma olup, veriler 2021 yılında bireysel yarı yapılandırılmış görüşmeler yoluyla yüz yüze toplanmış ve içerik analizi yöntemiyle analiz edilmiştir. Araştırma sonuçları sosyo-ekonomik açıdan daha iyi düzeyde olan ebeveynlerin süreçte çocukları için uygun eğitimin sağlanmasında olumlu deneyimler edindiklerini buna karşın diğer ebeveynlerin birçok problemle karşılaştıklarını göstermiştir. Özellikle ebeveynlerin öğretmenlerden beklentileri; işbirliği ve iletişim içerisinde olmak, çocukları ile ilgili takip ve yönlendirme yapmaları şeklindedir.

Araştırma sonuçlarına göre COVID-19 sona ermiş olsa da Türkiye'de 2023 yılında yaşanan deprem ve olası diğer sağlık sorunları göstermektedir ki uzaktan eğitim konusu etraflıca tartışılarak özel gereksinimli bireyler için afet durumlarında uygulanabilecek eğitim eylem planlarının hazırlanması gerekmektedir.

Anahtar Sözcükler: COVID-19, ebeveyn, engellilik/yetersizlik, kaynaştırma/bütünleştirme, özel gereksinim, pandemic, uzaktan/çevrimiçi eğitim

INTRODUCTION

The coronavirus pandemic (COVID-19) has had profound effects on people's lives all over the world (Fegert et al., 2020; Patel, 2020). With the declaration of a global pandemic by the World Health Organization ([WHO] 2020), it has been decided to conduct virtual education activities at all levels of education in Türkiye (Can, 2020). As a result of the restrictions brought by the COVID-19 pandemic, in-person education was interrupted and many problems were encountered with the transition to virtual education (Frederick et al., 2020). Parents, children, and teachers faced many problems. Children couldn't participate in education due to socioeconomic inequalities, having problems accessing technological devices and accessing the internet connection, or having a weak internet connection (Abuhammad, 2020; Kaden, 2020; Özer et al., 2020; Parmigiani et al., 2021; Petretto, 2020; Uluenya et al., 2021). It also increased the stress of parents as a result of the closure of schools, the limitation in social relations, the necessity of supporting education at home, and decreased the support systems provided by other family members (Brown et al., 2020; Fegert et al., 2020). Along with these problems, it is seen that children with special needs and their parents are also negatively affected by this process, which affects all individuals, and they are more vulnerable to these negativities (Akçay & Başgül, 2020; Aishwarya & Kan, 2020; Asbury et al., 2020; Frederick et al., 2020; Hassiotis et al., 2020).

During the COVID-19 pandemic, children with special needs experienced negativities such as not being able to benefit from virtual education, reluctance to participate in studies, and regression in their development due to their difficulty in focusing on the screen (Akbulut et al., 2020; Ayda et al., 2020; Şenol & Yaşar, 2020). At the same time, these children experienced problems in accessing both virtual applications and educational materials (Parmigiani et al., 2021; Varışlı, 2021). In addition, the majority of these children with special needs could not receive the support education services they received from special education and rehabilitation centers (Yakut, 2021). Especially, children with intellectual disabilities and their parents has been adversely affected as a result of the closure of schools, the closure of daytime activity centers, the problems in accessing specialists, and the inability to benefit from support services (Aishwarya & Kang, 2020).

Due to the decrease in access to virtual education, children with special needs have problems acquiring new skills (Kim & Fienup, 2021), while there has been a decline in the daily life skills, academic, and social skills of these children (Sonnenschein et al., 2022). Because the support training and therapies that these children with special needs receive from schools, special education and rehabilitation centers have been interrupted due to the restriction decisions taken within the scope of COVID-19 (Asbury et al., 2021; Barnett et al., 2021; Petretto et al., 2020; Singh et al., 2020; Soudien, 2020). In a study comparing the anxiety levels of individuals with special needs and individuals with typical development during the pandemic process, it was found that individuals with special needs had higher anxiety levels (Sideropoulos et al., 2022). It has been determined that children experience anxiety and restlessness (Patel, 2020). In addition to children with special needs during the COVID-19, the parents of these children have also experienced many problems.

The COVID-19 pandemic has caused a significant change in the lives of parents all over the world. In this process, parents faced many challenges (Doyle, 2020; Tarbox et al., 2020). Parents stated that their children's feeding, sleeping, and using technology routines have changed and they have difficulty keeping them in front of the screen and doing homework (Koçbeker & Karamuklu, 2022; Yüksel Başar & Gündüz, 2022). In addition, with virtual education, the need for family support has increased in the use of technological devices and virtual education platforms (Petretto et al., 2020). However, it has been observed that parents with children with special needs during the pandemic process do not know how to organize the learning settings at home and have difficulty guiding their children correctly (Aishwarya & Kang, 2020; Lotfi et al., 2021). The results of the studies showed that parents experienced intense anxiety and stress during the pandemic process, had difficulties supporting their children, and were worried about them declining achievement in education (Asbury et al., 2021). Parmigiani et al., (2021) stated in their study that no progress can be made in the absence of cooperation between teachers and families in supporting children with special needs in the virtual education process. In addition, it has been concluded that children who have difficulty managing virtual activities on their own are exposed to more exclusion because they cannot receive appropriate support (Parmigiani et al., 2021). Similarly, it has been determined that there is a decrease in access to in-person therapy services in the virtual education process and that parents experience difficulties because they have to assume the roles of special education specialists and therapists (Sonnenschein, 2022).

During the COVID-19 pandemic, children and their parents who continued their education in separate school settings, classrooms of special education, or inclusive education settings experienced various difficulties.

In the research conducted by Yazçayır and Gürgür (2021) with the parents of children who continue inclusive education settings, it was aimed to examine virtual special education activities during the pandemic process. The findings showed that children with special needs cannot follow the lessons regularly on TV, many of them do not attend virtual classes and their teachers do not give feedback about their activities. Similarly, another research revealed that the hours of special education and other services received by these individuals decreased with the transition to virtual education during the COVID-19 pandemic, that most of the children could not participate in virtual education without adult support (Sonnenschein et al., 2022). Jia and Santi (2020) focused on the process of inclusive education for children with special needs during the COVID-19 pandemic in China was examined, parents stated that they did not know how to support their children at home and they could not get support in this regard. This situation has been increased the burden of parents and parenting stress (Akçay & Başgül, 2020; Ren et al., 2020). Especially challenging behaviors of the parents of children with special needs are exposed to more stress with the decrease in support (Prime et al., 2020). In this process, the anxiety levels of mothers who were primary caregivers increased and their quality of life was adversely affected (Yarar et al., 2021). In this process, parents of individuals with special needs stated that they received limited support during virtual education applications and that they needed more support regarding material and educational content (Erdem et al., 2021; Kaya & Şahin, 2023).

When the literature is examined, it has been observed that there are a few studies specially conducted with individuals with special needs and parents during the pandemic process (Erdem et al., 2021; Esentürk, 2021; Lotfi et al., 2021; Koçak Oksev et al., 2022; Sonnenschein et al., 2022). When the international and national literature is examined there is limited research on what parents did at home to support their children with special needs receiving inclusive education during the virtual education process (Sonnenschein et al., 2022; Yazçayır & Gürgür, 2021; Yüksel Başar & Gündüz, 2022). As a result, it has been emphasized that studies can provide useful information on how virtual education services can be developed in cases such as pandemics for children who need inclusive services, taking into account the COVID-19 process (Abuhammad, 2020; Parmigiani et al., 2021). For this reason, it becomes an important issue to identify the problems faced by the children, and especially their parents, who take part in inclusive education in virtual education activities during the COVID-19 pandemic. It is considered important in terms of shedding light on the measures to be taken to reveal the extent to which children with special needs have access to virtual education activities, the problems and obstacles experienced in the process, and the solution proposals for these problems. Thus, it is thought that accessing the experienced problems from the eyes of the parents will contribute to the effectiveness and applicability of future applications. Because family is an indispensable part of education. This research covers the parents of primary school children with special needs who continue inclusive education settings and the problems these children and their parents experience at home.

In this context, the research aims to investigate the experiences of the parents of children with special needs who continue their education in inclusive settings, problems of parents, and the solutions for the problems they experienced in the virtual education process at home during the COVID-19 pandemic. For this purpose, answers to the following research questions were sought:

- 1. According to parents, what experiences did parents have at home in participating their children with special needs in virtual education and tracking the process of virtual education
- 2. What experiences did parents have in involving their children with special needs in virtual courses and in following their children's education activities?
- 3. What are the suggestions of parents to solve the problems of involving their children with special needs in virtual education process?

METHOD

Research Design

This research was designed as a phenomenology research, one of the qualitative research methods approaches. The phenomenology research can be defined as a research design that enables one to understand how individuals perceive certain phenomena, how they explain their experiences with these phenomena, and to have in-depth knowledge (Saban & Ersoy, 2016).

Participants

This research was carried out with nine parents who have children with special needs living in two provinces of the Marmara region. The conditions of being the parents of primary school children who continue their education in inclusive settings and voluntarily participating in the research were sought for this study. Therefore, the participants of the research were determined by the purposive sampling method. Participants were required to have a child with special needs who goes to an inclusive school setting and to participate in the research voluntarily. All participants were mothers of children with different types of special needs. Mothers were in the 30-45 age range and mostly graduated from high school. Each participant was given a codename as E1, E2, or a nickname. Moreover, four of children were female and five ones were male of children included in the study. Four of the children are in 4th grade, one is in 3rd grade, three are in 2nd grade and one is in 1st grade. When the participating children were examined in terms of disability types, it was seen that four was diagnosed with mild intellectual and developmental disability, one with physical disability, three with language and speech impairment, and one with learning disability.

Data Collection

In this study, a semi-structured parent interview form was used to reveal the views of the parents. This form was first prepared as a draft by the researchers in the context of the literature (Brown et al., 2020; Erdem et al., 2021; Sideropoulos, et al., 2022) then it was finalized by taking expert opinions from three experts working in the field of qualitative research methods, special education, and conducting a pilot interview before collecting the data to control the interview process, and questions. There were nine open-ended questions and probes related to the questions. The questions stated that "(1) How did you carry out your child's virtual education activities during the COVID-19 pandemic? (2) What would you say about your child's participation in virtual classes during the COVID-19 pandemic? (3) During the COVID-19 pandemic, what kind of problems did you face in the process of involving your child in virtual classes and following your child's education activities? (4) During the COVID-19 pandemic, what are the problems your child is experiencing in participating in virtual classes, keeping track of class activities and homework? (5) What do you think about the reasons for your child's problems with virtual class participation during COVID-19? How would you describe these reasons? (6) How would you evaluate the school-family cooperation process in terms of your child's participation in virtual classes and following their education during the COVID-19 pandemic? (7) What kind of arrangements could be made for your child's participation in virtual courses and the problems he/she has in following educational activities and homework? (8) What are your suggestions for solutions to the problems experienced in your child's participation in virtual courses and following educational activities? (9) What else would you like to say about your child's participation in virtual classes and the process of following educational activities during the COVID-19 pandemic?"

In the research, data were collected with the individual semi-structured interview technique. To collect the data with the knowledge of participants; first, the day and time of the interview were planned, and then the data collection setting was determined. The data were collected in-person in November 2021 at the schools where three researchers worked. At the beginning of the data collection process, participants were asked to fill out the participant consent and a demographic information forms. Parents and researchers didn't have any relationship in terms of teaching their children in those schools and those researchers didn't provide any training to these parents. The interview took between minimum 16 and maximum 52 minutes and recorded on a voice recorder with the necessary permissions of participants.

Data Analysis and Reliability

The data obtained in the research were analyzed by content analysis. During the analysis of the data, firstly, the audio recordings were deciphered, the data files were organized, and checked the reliability of the transcripts. After that coding the data obtained in the research and checking the reliability of the codes, as a third step determined the themes of the coded data, and lastly organized the codes and themes studies. Then, by reading the data files, codes were created with the in vivo technique. From these codes, main and sub-themes were formed in the context of interviews and research questions. Within the scope of reliability, studies were carried out among the researchers on 30% of the data to check whether the audio records transcripts were typed correctly. and to estimate the reliability between the inter-coders. Inter-coder reliability was between the researchers. One researcher coded the data and another researcher randomized 30% of the data and recoded it independently of the other researcher. The codes of these two researchers were then compared and inter-coder reliability was calculated using the formula "Number of consensus / (Total number of consensus + Number of disagreements)" proposed by Miles & Huberman (1994, p. 64) was used. While the reliability of the transcription of the voice recordings is 98%, the reliability between the inter-coders was 90% for the study.

FINDINGS

In this study, which was carried out to analyze the problems experienced by the parents about the virtual education process of primary school children with special needs attending inclusive education at home during the COVID-19 pandemic. The findings were presented by grouping the main themes associated with each research questions, objectives, and the codes associated with sub-themes. When the data were analyzed, six different main themes and 26 sub-themes were reached.

Findings on Experiences of Families at Home Regarding the Participation of Their Children with Special Needs in Virtual Education and the Tracking of the Virtual Education Process

Participating in virtual education

One main theme, three sub-themes, and 33 codes were obtained in the context of participation in virtual education. Within the scope of this finding, in the main theme of "Participating in Virtual Education", it was seen that parents expressed their children's experiences while conducting virtual education and the reactions they observed in themselves, their children, and the teacher. Under this main theme, three sub-themes were obtained "parent reactions, child reactions, and teacher reactions (see Figure 1)".

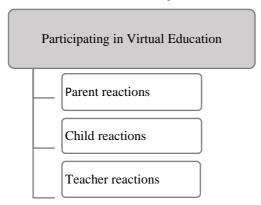


Figure 1. Main and sub-themes related to engaging in virtual education

In the parent reactions sub-theme; "attracting attention to the virtual courses, having difficulty, allocating time to children, taking care of other children, not doing homework for the children, parents explaining the virtual education to the child, getting support from the father, having another child, need continuous support, the expectation of the children's improvement, the parent's fear of virtual education, the anxiety of forgetting the lessons, virtual parental support, parental insistence on homework, punishing, giving reinforcement, talking with the teacher" codes were reached. Regarding the parental insistence code, E2: "For example, I insist a lot when he doesn't do his homework. If he still doesn't, that day goes blank, and asks the teacher. Emir, why wasn't this done? He can't answer. Because he didn't want to. I am writing, "my teacher did not want to do it". I did not force it. You do what is necessary." Regarding punishing and giving reinforcement codes, E2: "Ha, he took the punishment even if he had to. Oh, if that day did not overwhelm me. He attended the class very well. If I had to give an award, I gave it. Something he wanted."

In the sub-theme of child reactions; The codes of "the child's inability to attend classes, not staying in place, crying when homework is not done, overcoming problems in time, not getting help when the children's request for help, the inability to allocate time for EBA TV, finding an excuse" have been reached. In the code for the children's request for help under the sub-theme, E2: "Now he sat down and started not to get up. He was listening to his teacher very well. When he had to write, he wrote. He still asked me for help when he could not reach or when he wanted something."

The last sub-theme was teacher reactions. This sub-theme contains codes of "having homework, teacher entering the class, the teacher getting angry". Regarding having homework, E4: "Oh, teacher, it was really good. Our teacher got into all of them. There was no problem. We had lessons every day. That's why we didn't have any problems."

Tracking of virtual education process

Under the findings within the scope tracking virtual education process one main theme, three sub-themes, and 59 codes were obtained. Under the main theme, three sub-themes were reached, namely "access to the course, participation in the course, and course settings (see Figure 2)".

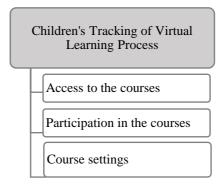


Figure 2. Main and sub-themes related to children's tracking of virtual education process

The codes were reached under the sub-theme of access to the courses are "class participation, adding virtual education problem besides learning problems, decrease in TV usage after internet usage, not being able to attend classes, being dropped off the system, using tablet and phone more effectively, difficulty in connecting to class, using EBA TV for repetition, computer use, inability to log into EBA, long time to attend the class, not using EBA TV, EBA TV does not attract attention, getting the internet from a neighbor, connecting regularly every day, not having any problems, and not attending the virtual course." Participant E6 said about the code of getting the internet from the neighbor and connecting by phone "We didn't live. I used the internet from my upstairs neighbor. I didn't have any trouble. He was able to attend his classes continuously. We connected by phone. I did not use a computer." Regarding the code of difficulty in connecting to the course, E2 said "Think about it, the children's Cem. I will enter the number of the school, enter the password, and enter the EBA. I will open the password of EBA. Until they are connected, that is, three devices, I am walking around the house. Which one do I connect to? We are drenched in sweat."

Within the scope of another sub-theme of participation in the courses some codes such as "experiencing problems due to inadequacy, missing lessons, busy parents, difficulty in completing activities, getting news late, regular participating in classes, following the child, regular virtual education, positive effect of medication, difficulty without medication, child weariness, using the computer, difficulties in listening, focusing on television, participation in the lesson without exception, and attending the lesson except for illness" have been reached. In the code of regular participation in the classes, E5 said "There was no problem. We regularly attended his classes at the time our teacher had told us and did our break. He never missed that lesson hour." In the drug-free strain code E8 expressed "We went through a very difficult process without taking medication. Despite that, we had a hard time reading it, in other words, in homework."

The last sub-theme includes the codes such as "The teacher gives the right to speak, the teacher wants the camera on, EBA, etc. never using the virtual platforms, asking to participate virtual, only going to rehabilitation, taking pictures of the lessons, teacher's guidance, teacher's tolerance, no problem in following the teacher, reminder of homework from children to parent, teacher control, teacher feedback, teacher's motivation, arranging the home settings, sending videos to the teacher, giving homework regularly, the teacher's message network, codes were obtained. In the code of the teacher's right to speak, participant E5 said "We attended our lessons regularly as if we were coming to school. We took our homework regularly, we did it, our teacher checked it. It gives our children the right to have a say during the lesson." In the code of giving homework regularly, E4 expressed that "Our homework was regular, and when something happened, I was writing."

Findings on Experiences of Families in Involving Their Children with Special Needs in Virtual Courses and in Tracking Their Children's Education Activities

The problems experienced at home by parents and children during the virtual course time

According to the findings of the research, six sub-themes under two main themes, a total of 95 codes were accessed. The main themes are "Parents' Problems in Involving in Their Children's Virtual courses " and "Child's Problems in Involving in Virtual Education Activities and Tracking the Process (see Figure 3)".

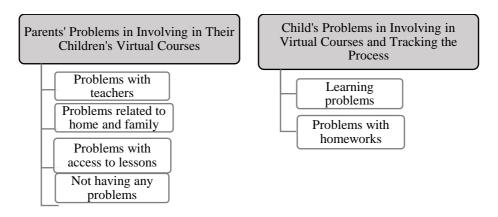


Figure 3. Parents' and children's involving in virtual education and the problems of tracking the virtual education process

In the analysis results, the main theme, "the problems of parents involving in their children's virtual courses contains four sub-themes. These are "problems with teachers, problems related to home and family, problems with access to course and not having any problems." Under the sub-theme, the problems with teachers found some codes such as "not getting support from the teacher, ignoring the children, not sending the homework to the teacher, not being able to talk to the teacher, not communicating with the parents." Regarding the code of the teacher not communicating with the parent, E7 said "So I had a lot of difficulties. Honestly, the teacher did not ask why you couldn't connect and why didn't you attend the class. He has never made such a request anyway." Regarding the code of not getting support from the teacher, E7 explained "So I would at least want them to follow. If the teacher couldn't help it, I would like the teacher to talk to the administration and find a solution to this. This is not only for my child but also for other children." In the sub-theme of problems with teachers, parents expressed the communication and coordination problems they experienced with teachers while following their children's education processes.

In the sub-theme of problems related to home and family, "the presence of younger siblings at home, the absence of the teacher's authority at home, having difficulty in teaching, neglecting housework, lack of time for other children, blaming the mother, allocating a room for each child, arranging the home setting, the responsibilities of the mother, the family's difficulties reaction to the children, forcing the children to the lesson, standing at the beginning of the lesson, supporting the lesson constantly is tiring, the parents threaten the children with the teacher, the parent shouts at the children" codes have been reached. Regarding this, in the code of having younger siblings at home, E1 said "What if we have a hard time at home, of course, when there are small children at home, I think it's a big problem. A little boy playing there. And he has to teach there." Regarding the tiring code of constantly supporting the class, E4 explained "I mean, standing by it made me a little tired, because when I go, other things are brought. He was losing his focus on the lesson. Give yourself come on, raise your finger. A child who can do it when I say you can do this question."

Under the third sub-theme, problems related to access researchers reached lots of codes such as "financial problems, not being able to get a computer, disruption of the order in the pandemic, Zoom problems, problems with the internet, not getting one-on-one virtual training, not participating in EBA TV broadcasts, connection problems, computer breakdown, inability to access the lesson, not attending the virtual lesson, inequality in tablet distribution." In the code of troubles related to the internet, E2 expressed "We also attended the training via normal EBA and Zoom, but we had constant problems on the internet. We couldn't get much efficiency from the computer. Then we moved on to the tablet. So you have five minutes to class. For example, when the teacher opened it. I'm running to the computer; ...I travel around the house with three tools."

Under the last sub-theme, not having problems; "Positive effect of the drug on homework, not having problems in class participation, not missing classes despite problems, children taking homework seriously, willing participation in class, better in-person, not having problems in connection, not having problems in class activities, not getting bored, not leaving class, not having problems in accessing system, hybrid better, efficient virtual coursework" codes have been reached. Regarding the code of willing participation in the lesson, E6 said "It was okay, my teacher loved his lessons. Since he was very willing, I did not have any trouble in that direction." Regarding the better in-person code, E1 said "Huh, he was also very restricted in physical activities. We watch sports on TV for a while and get moving from there. We know that we are doing sports or something. We were restricted at home. Here now schools are open and they are playing with the children as well as with their friends."

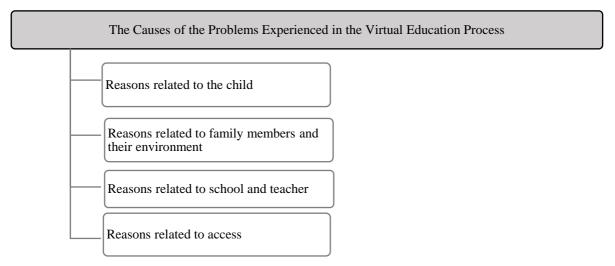
Regarding the findings, another main theme was named "Child's problems in participating in virtual education and following the learning process. It was seen that the parents expressed the problems related to the learning and homework that their children experienced during the virtual education process. Two sub-themes were obtained in this main theme. Under the sub-theme of learning problems; "Failure to make eye contact, inability to focus, not understanding what you read, doing the question wrong, forgetting what has been taught, trouble in learning, being forced by your sibling, making reading mistakes, withdrawing into the child, not wanting to go out, crying, wanting to hug, being active, reactivity in the child, difficulty returning to the lesson after the game, not having any grade anxiety, being comfortable, being aggressive, attention problems, not being able to socialize during the pandemic, staying at home" codes have been accessed. Regarding the code of reactivity in children, E1 said "Actually, our teacher, take pictures of the lessons you teach in general and send them to me. He was giving directions as if I could follow him, but we could not do our only lessons until this year, except this year." Regarding the children's attrition code, E2 said "Psychologically, he was very worn out. Imagine if I was worn out. Yes, we are in the same house."

In the last sub-theme, the problems with homework, it is stated that "hard homework, difficulty in doing homework independently, a reminder of homework, forcing the children to do homework, sitting next to him in homework, no homework, no homework follow-up, parent support". The codes of "requirement of the family to do their homework, parental support in mathematics" were obtained. Regarding the code of lack of sense of responsibility in homework, E1 explained that: "He did not have a sense of responsibility only in doing the lessons and showing that lesson to the teacher or the teacher presenting it." Regarding the code of not giving homework, E9 said "So as I said, we always took it with special training in this process. No homework was given. In other words, the teacher sent a few links and said we can study."

The causes of the problems experienced in the virtual education process at home

Within the scope of this research, one main theme, four sub-themes, and 22 codes were accessed from the findings related to the causes of the problems experienced in the virtual education process at home settings. The main themes and sub-themes obtained based on the findings are presented in Figure 4.

Figure 4. Findings on the reasons for children's problems in participating in the virtual education process



Based on the data obtained during the research process, the parents expressed the reasons for the problems they experienced while tracking the virtual education processes of their children. Under the main theme, the subthemes "reasons related to the child, reasons related to family members and their home settings, reasons related to school and teacher, reasons related to access" were reached. Under the sub-theme of child-related reasons the codes of "staying in front of the screen all the time, the children wanting to travel, not wanting to attend the class" have emerged. Regarding the code of being in front of the screen all the time, E2 said "The reasons for the problems experienced are that children sit and look at the screen all the time...". Regarding the code of the children wanting to travel, E2 said "Because he was not sitting. Look, it was a lot, it was moving. He always wanted to move around." In the sub-theme of reasons related to the child, parents stated that their children had problems in the virtual education process based on the individual characteristics of their children with special needs.

The second sub-theme that emerged in the analysis was family members and reasons related to their home settings. Codes of "financial problems, psychological state of the parents, difficulties in the programs of the

mother, the mother's work, the mother's inability to spare time for the child, the work of the parents, the use of the computer by the older brother" have emerged. Regarding the code of parents working, not having another computer, and using the computer by the brother, E7 said "I was working here, my wife was working in the shop. We have a computer in our house, but my older son was using it. For not Ali." In the sub-theme of reasons related to school and teacher, the codes of "given homework only from EBA, there are no course settings, the teacher does not make individual plans, and academic goals are not set" have been reached. E9 said "Only homework from EBA was given. In the second year, we started individually with special education."

Within the scope of the sub-theme of reasons related to access, the codes "problem in connecting to programs, Zoom, EBA is unknown, not understanding English, not having a computer, learning problem in Zoom, late connection to the internet" codes emerged. Regarding the late internet connection code, E4 said "Actually, I joined, we did not have internet at home at first. We also went through a difficult period with my wife in the past years, and our shop was closed financially. My wife couldn't get a job. We had it connected to the internet a month late." Regarding the code of not having a computer, E7 said "My teacher couldn't attend because I couldn't be with Ali as I said at that time, I hope that if we had a computer, maybe we could participate again somehow." In the results obtained, it is revealed that families see the problems arising from access as the causes of the problems their children experience during the virtual education process and emphasize them.

School-family cooperation in virtual education process

In this study, one main theme, three sub-themes, and 31 codes were obtained about school-family cooperation. Under the main theme, the sub-themes of "parental expectations, experienced problems, and positive experiences" were reached. The main theme and sub-themes formed based on the findings obtained from the research are presented in Figure 5.

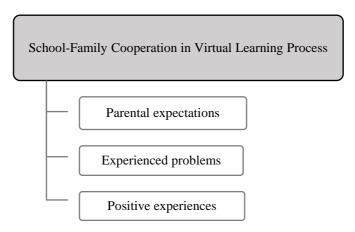


Figure 5. Findings on school-family cooperation in virtual education process

When the parent expectations sub-theme is examined, it was observed that parents expressed many expectations, that they expected help and cooperation from school administration and the teacher. Under this sub-theme, the codes of "expectation of dedication from the teacher and school, follow-up of the teacher, supportive speech of the teacher, cooperation between the school and the family, allocating time for the children, calling the teacher" were obtained. Regarding the code of expectation of self-sacrifice from the teacher, E1 said "Okay, maybe we had a problem in teaching a lesson specifically for my child. Maybe the teacher was tolerant of this, but maybe he could have been a little more selfless." Regarding the teacher's call code, E4: "I mean, if I evaluate it compared to last year, I would like to be called and asked a little more, teacher."

Within the scope of the "problems experienced" sub-theme codes of "not being called by the school, not making a plan for the children, not having school-family cooperation in the pandemic, not being interested in the school, not being afraid to call the teacher" were obtained. Regarding the code of never being called by the school, E9: "You know, I didn't get called because I said, Can your child follow inclusive classes? I have never been called by the school to see how the process is going." It is understood that the parents reported that the problems they experienced during the school-family cooperation process were at the point of communicating with the school during the COVID-19 pandemic.

Parents expressed their positive experiences regarding the school-family cooperation process under the last sub-theme. This sub-theme included codes as "Family's support expectation, there is no problem in cooperation, regular communication with the teacher, being able to communicate with the teacher on WhatsApp, being satisfied

with the teacher, teacher support, asking the teacher, not having problems in communication, not having problems with school, school support, guidance counselor support, trusting the school, meeting the teacher with the children, feeling lucky about the teacher, possessing the teacher". Regarding the code of communicating with the teacher, E8: "We were in dialogue with our class teacher. It is very good, so there was no trouble, no problem, it did not happen." For the code of school support, teacher support, and guidance counselor support, E2: "Yes, we received support from the school and our teachers."

Findings About Suggestions for Solutions to the Problems Experienced in the Virtual Education Process

The findings regarding the solution suggestions of parents regarding the virtual education process, two main themes were obtained as "Parents' Solution Suggestions for the Problems" and "Solutions Applied to the Problems" seven sub-themes and 40 codes under the relevant themes. The main themes and sub-themes are presented in Figure 6.

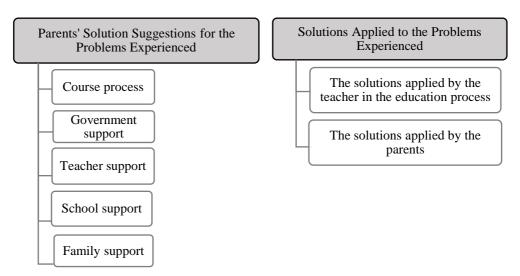


Figure 6. Findings regarding parents' solution suggestions regarding the virtual education process

Based on the comments of the participants, in the main theme of "Parents' Solution Suggestions for the Problems Experienced", it was seen that parents expected to support on various issues and suggested this support as solution suggestions. Under this main theme; the sub-themes of "course process, government support, teacher support, school support, and family support" were obtained. When the lesson process sub-theme was examined, it was seen that the parents expressed many expectations and stated that increasing the support of the teacher in the lesson, making innovations in the course process, getting support from the government, and providing support from the school and family would be benefited in the education of the child with disability. In this context, under the course process sub-theme; The codes of "dividing the course subjects, the teacher separating the two lessons for the children, private lessons in the pandemic, opening extra lessons, giving in-person lessons, conducting inperson activity lessons, conducting virtual studies, doing activities for the child" were obtained. Parents have made suggestions for increasing teacher-children interaction and providing more individual and intensive education in their suggestions for solutions to the problems.

Regarding the division of the course topics, E9: "There are thirty hours of weekly course hours. Let's say twenty-five hours out of these thirty hours, here is Turkish lesson, mathematics, and so on. Free activity in five hours. What are the other kids doing at that hour? For the other child, free activities were painting, music, etc." Regarding the teacher's allocation of time to the children, E9 said "I want the teacher to devote thirty lessons, two of which are for children with special needs, two of them in a week. You know, if it is planned according to twenty-eight hours, special education is arranged for the children by the classroom teacher, with two hours of normal education per hour."

Under the sub-theme of government support, the codes of "the government should support financially, the government should control families (how are they doing), rehabilitation centers should not be closed, government control should be increased, the child should be handled by experts, support for sibling care" codes were obtained. In this context, regarding their codes, E4 said "I think the government can support these children a little more financially, too. Mothers or families can check a little more. There is no money. Private lessons are expensive." It can be said that parents expect more government support in the education process of their children. Under the

teacher support sub-theme, the codes "setting short goals, the teacher spending time with the child, the teacher being conscious, expecting attention and direction from the teacher, the teacher's value to the children, the teacher's communication, making phone calls" codes were obtained. Regarding the code for the teacher to spend time with the child, E9 said "I was thinking that according to the level of that child, for example, if it is syllable teaching, I don't know syllable teaching, if he has an interest, the teacher can spend time with the child."

The sub-theme of family support includes the codes of "the family motivates the children and provides a suitable setting". Regarding these codes, E1 explained "The family should motivate the children at home, and the settings should be prepared in a quiet way and in a way that he can focus." It is seen that parents care about creating a suitable education setting at home during the virtual education process.

Another solution proposal by the parents in the research was about school support. The sub-theme of school support includes the codes of "providing a computer, psychologist support, informing parents, directing the family, and providing education to the family". Regarding the psychologist support, E4 said "I want it in private lessons. I need psychologist support. But I cannot do these things with my wife, sir." Regarding the codes that the school should give computers, E7: ...Or at least I expected the school to do something, I think they could have taken care of these children if they did not have computers, they could have provided them from the school." It is understood that parents expect the school to play a role in the supply of equipment as a solution source for the problems of access to the course regarding the education of their children. In addition, it is seen that parents expect education from school and psychological support for themselves. Regarding the codes E4 said "In fact, it was necessary to guide us as well. For example, how can I explain this lesson to him? How does he get his attention quickly? I don't know these. I did not receive any training for this. I keep warning him..." Based on this finding, it is understood that parents need family guidance and education to contribute to the development of their children in the virtual education process.

This study released that parents applied some solutions to solve the problems experienced at home during the virtual education process. Under this main theme, "solutions applied to the problems experienced", two different sub-themes were obtained, namely "the solutions applied by the teacher in the education process and the solutions applied by the parents". In the sub-theme of the solutions applied by the teacher during the education process, the codes "getting an assignment from the special education center, getting to know the children's character, affording to socialize the children in rehabilitation, taking precautions without any problems, the teacher's motivation" emerged. Regarding the code for the teacher to provide support education, E2 said "Teacher was giving lessons to her. You do very well. Yes. He said you read. Support was training. Our class teacher did too. I saw a lot of benefit in it." Regarding the code of taking precautions without problems, E3: "We were a teacher who took precautions before a problem arose. Because he knows all of the children." Regarding the code for making make-up lessons, E5: "What was our teacher doing when the electricity was cut off? What was I doing if I couldn't do the class at that hour if you had that power outage? I'm throwing. For example, our lesson ends at two o'clock. What's happening? Our teacher was giving lessons for another hour after two." Considering these findings, it is seen that parents make an effort to take precautions during the pandemic process and to provide support for the child's education process.

Within the scope of the sub-theme of solutions applied by parents regarding the problems experienced; The codes "creating a workspace at home and explaining the epidemic to the children" have been reached. Regarding these code, E2 said "I bought one table in the living room. Because everyone in the living room during the day is at work. I put a bookshelf for him in the living room." As for the code of explaining the epidemic to the children, E2: "...and I was trying to explain it to him. My mother, because there is a pandemic." It is understood that the ways that parents resort to solving the problems are to explain the current epidemic process with their means and to create a suitable learning environment for their children.

DISCUSSION & CONCLUSION

This study examined the problems experienced by parents about the virtual education process of primary school children with special needs attending inclusive education at home during the COVID-19 pandemic. The findings obtained from the research were discussed in the context of research questions.

Problems experienced by parents in the virtual education process at home

Research findings showed that primary school children with special needs who continue inclusive education experience difficulties in participating in virtual education for various reasons. Parents stated that they experienced login and connection problems in terms of accessing the courses and using EBA and Zoom platforms, and in

addition, they had difficulties in using these platforms. Parents faced financial problems and accordingly they experienced technological hardware problems. It was observed that they had to be connected by cell phone to attend courses and they had difficulties in attending courses due to connection problems. However, some participants stated that they could follow virtual courses regularly and did not experience connection problems. In these respects, the experiences of parents differ as positive and negative. Analyzing the literature, Parmigiani et al., (2021) similarly found that connection problems and deficiencies in technological equipment negatively affect access. In addition, Sakarneh (2021) stated that parents faced infrastructure and technical problems related to accessing virtual education, and they experienced poor internet connection problems. Demir and Özdaş (2020) determined that the conditions of parents are not equal in the conduct of virtual education activities during the COVID-19 process, there are problems in using the EBA platform, there are technological hardware inadequacies in the home settings and parents have information problems in using technology. When the research findings are examined, it can be explained that most parents have problems in accessing virtual education, as well as parents who do not encounter any problems, may be due to inequalities in socio-economic level among the participants. In addition to, children with special needs who receive education in inclusive environments normally receive education in support education rooms (MoNE, 2018). However, due to the COVID-19 pandemic, families may have experienced some problems as these supports could not be fully provided during the virtual education process.

In the research, important findings were obtained about the reactions of the children toward the virtual education process. For example, it has been determined that children have difficulties in class participation due to the problems of not being able to make eye contact, focusing, and forgetting what has been taught. The children had difficulties in listening to the teacher from the computer and standing at the table for a lesson. Similarly, Juneja and Gupta (2020) stated that children with learning disabilities and attention deficit hyperactivity disorder (ADHD) have problems making use of virtual training sessions effectively due to their short attention span and comprehension problems. The findings of the research conducted by Mengi and Alpdoğan (2020) also showed that children with special needs have difficulties in the virtual education process, that children cannot take responsibility in the home settings and cannot maintain the skills they have gained in-person education during the virtual education process. These research findings also support the literature and showed that children have difficulties due to being constantly in front of the screen and that children experience reluctance to participate in the courses. Similarly, according to literature children with special needs had low motivation, were bored in live lessons and had problems with distraction (Yüksel Başar & Gündüz, 2022). Based on the research findings and the literature, it can be said that children with special needs experience various problems in following virtual courses, due to the lack of adaptation or application for these children for the virtual courses.

According to the research findings, some parents stated that teachers spoke with their children to stay at the lesson and motivate them about the participation of children with special needs in virtual education. However, the research findings showed that some families could not get enough support from their teachers and could not meet with the teachers. The teachers did not take into account the individual needs of children with special needs. Based on this information, children who receive education within the scope of inclusive services are expected to attend live classes in the same setting as their peers (Trzcińska-Król, 2020). In addition to the access and participation problems experienced during virtual education, it is thought that these children are affected more negatively both because of the difficulties they experience in attending classes due to inadequacy of virtual lessons and because the support education activities did not be carried out during the pandemic period.

Research results show that parents experience various difficulties at home settings. These difficulties are teaching the child at home, having difficulty in allocating time to other children, having to constantly support their children, having to exhibit negative behaviors such as threatening or shouting while supporting them, and finally, the responsibility rests on the mothers. Parents had to take on an educational role in this process. However, due to their lack of knowledge and skills in this regard, they needed family training and support (Mengi & Alpdoğan, 2020). Similarly, another research finding revealed that parents have to assume the role of teachers in the process of supporting the education of children with special needs (Trzcińska-Król, 2020). In addition, according to literature parents have difficulties motivating their children and completing their homework. It has been seen that most parents do not know the necessary strategies to teach children, and in this respect, it is necessary to get support from the school and to cooperate with the teachers (Sakarneh, 2021). In one study, the attitudes of mothers with children with special needs to cope with the problems they experienced during the COVID-19 process were examined, and the findings of the study revealed that most of the mothers did not know about how to manage the learning process in the home settings (Lotfi et al., 2021). Based on this information, the findings showed that parents needed significant support and cooperation with special education service providers during the COVID-19 process.

Regarding the psychological effects of the COVID-19 pandemic, it has been found that children are withdrawn, do not want to go out, exhibit behaviors such as crying and hugging, irritability and aggression are observed, and children cannot socialize due to the pandemic. Similarly, Berasategi Sancho et al., (2021) showed that during the COVID-19 pandemic, children with special needs were affected psychologically and cried more than at other times were nervous and nervous, and developed some negative behaviors. The reasons for this can be attributed to the closure of schools as a result of the COVID-19 pandemic and the significant limitation in the social relations of children with special needs. In addition, the necessity of following the education from home and the parents experienced an increase in their stress levels because they could not get support from other family members. It is thought that this situation will also have effects on children (Brown et al., 2020; Fegert et al., 2020). In addition, it was found that families had financial difficulties in the virtual learning process, could not spare enough time for their children because they had to work, and were affected psychologically by this process. Research findings on this subject show that parents of children with special needs have higher stress levels, and their quality of life and mental health are adversely affected more than parents of children with typical development (Asbury et al., 2020; Lotfi et al., 2021; Ren et al., 2020; Yarar et al., 2021).

The research findings showed that there are both positive and negative opinions about homework and follow-up in terms of schools and teachers. While some parents stated that the homework was not regular, they had problems following the homework, the planning was insufficient, and the sense of responsibility did not develop in the children, while some parents stated that the homework was followed up regularly. In addition, some of the parents who participated in the research stated that they took a video about the follow-up of homework and sent it to the teacher and that they received homework regularly. In the study conducted by Yüksel Başar and Gündüz (2022), parents stated that children with special needs have difficulties getting their homework done. However, the findings of the research conducted by Yazçayır and Gürgür (2021) revealed that teachers shared homework in WhatsApp groups but could not give any feedback. Based on these findings, it can be said that teachers who do homework regularly support parents' homework, but irregular and unplanned homework puts parents in a difficult situation and stress.

According to the research, parents stated the reasons for the problems experienced as "reasons related to the child, reasons related to family members and their environment, reasons related to school and teacher, reasons related to access". According to the research findings, it was observed that children had to follow the process by sitting passively in front of the screen all the time. Therefore, it was found that children get bored quickly and want to move around. Parents stated that this problem was experienced due to the individual characteristics of the child. Another reason is family-related reasons. In this context, in cases where there is more than one child in the family, it was observed that the family provided the available resources to the child without disability and the child with disability could not follow virtual education. It was also found that family members had problems in following the virtual education process due to their lack of knowledge about technology and technical infrastructure. Another reason for the problems experienced by parents in the distance education process was found to be the lack of sufficient cooperation between the school and the family. According to Yarımkaya and Töman (2023) parents, infrastructure problems such as occasional electricity internet outages, internet quality and problems in the virtual learning system limited the participation of children with mild intellectual disability to online science lessons. Similarly, previous studies (Abuhammad, 2020; Garbe et al. 2020) emphasized that the most important obstacle for students during online education is internet access and electronic devices. Comparing the findings of this study with the findings of other studies, in this study, in addition to internet access, problems related to family, child and school were identified. The reason why the findings of this study differ from the literature may be due to the fact that the studies were conducted in different educational settings.

Research findings showed that parents expect help and cooperation from teachers and school administration. According to the findings, parents expected especially significant support from teachers. In this respect, it has been observed that there are expectations for monitoring and follow-up studies by showing interest in the children. In parallel with these findings, research findings of Yılmaz et al., (2020) showed that almost all parents 99.5% expect support and communication from teachers. Research findings show that parents have both positive and negative experiences in terms of school and family cooperation. In this respect, parents who stated that school and family cooperation was insufficient during the COVID-19 process stated that they were not sought by the school and were hesitant to call their teachers. Parents who expressed positive opinions stated that they communicated regularly through the WhatsApp application and received support from the teacher. In this respect, similarly, in the studies conducted in the national literature, it was found that parents used the WhatsApp application during the pandemic period in the conduct of educational activities (Erdem et al., 2021; Yazçayır &

Gürgür, 2021). Thus, WhatsApp was a common application to establish a communication between parents and teachers.

Parents' suggestions for solutions to problems

Research findings have shown that parents have developed many suggestions. Parents stated that they need support and in this respect, children with special needs should be supported especially with in-person support education. The findings showed that the schools did not carry out any support education activities. Only one participant stated that he received support from the special education and rehabilitation center through the WhatsApp application, with feedback and referrals. Similarly, research findings revealed that there are significant problems related to the delivery of support education services during the COVID-19 process (Yazçayır & Gürgür, 2021). In this process, it was determined that children with special needs could not benefit from support education services and these services could not be provided by the school.

Among the suggestions of the parents regarding the virtual education process were providing financial support, not closing the special education and rehabilitation centers, and providing support for the care of siblings. In addition, parents expected information from the schools, providing training to families, providing psychologist support, and providing support for the school's equipment and technological equipment deficiencies. One of the important findings of the study is that parents need family education programs and psychological support. Juneja and Gupta (2020) stated that during the COVID-19 pandemic, parents had problems accessing the basic services they needed, and children with special needs and their parents were in the risk group in terms of both physical and mental health problems in this respect. Therefore, it was emphasized that virtual intervention services could be useful for providing the necessary guidance and support services. In addition, the research findings show that it is important to carry out various trainings for parents to get effective results in the virtual education process (Erdem et al., 2021). It has been seen that the Ministry of National Education (MoNE) broadcasts on EBA TV for individuals with special needs and their families during the COVID-19 process, and the mobile application in My Special Education is implemented (MoNE, 2021a). However, the findings of the research conducted by Yılmaz et al., (2020) with the parents of children studying at primary and secondary education levels showed that 45% of the parents who participated in the research about the guidance and information broadcasts on EBA TV were not aware of the practices. When all these findings are evaluated together, it is seen that the MoNE has taken initiatives to provide guidance services for the families of individuals with special needs, but there are problems in the dissemination of these services or in informing the parents about these practices (MoNE, 2021b).

Parents made suggestions about the solution suggestions regarding the teachers, such as setting goals for the children, giving importance to communication with the children, and conducting interviews. Research findings showed that children with special needs did not receive the level of support they expected from their parents. In these respects, it can be said that teachers play an important role in providing support to these children and their families in the process of coping with the difficulties experienced by parents. According to the research findings of Ren et al., (2020) and Koçak Oksev et al., (2022), examining the stress levels of parents with children with special needs during the COVID-19 process, teachers need to cooperate with parents and provide support by developing various suggestions for problems, since parents of children with special needs feel more pressure than normal.

Conclusion and Recommendations

With this research, it was seen that many families were affected by the difficulties brought by the process during the COVID-19 pandemic at homes. In this process, parents had problems reaching for the information and support they needed. Both infrastructural problems in accessing virtual education and equipment inadequacies due to financial problems negatively affected the participation of these children in education. In addition to all these, in parallel with the studies in the literature, research findings show that especially parents could not benefit from individual support special education services. As a result, it has been understood that parents expected teachers to be in cooperation and communication, and to follow up and guide their children.

According to the findings of this study, various suggestions have been developed to prevent the difficulties experienced by parents. Because of the difficulties faced by the parents, their quality of life has deteriorated. For this reason, it is recommended that parents benefit from psychological support services. Therefore, it is important to provide virtual therapy support to the families of individuals with special needs for extraordinary events such as pandemics and earthquakes. Parents should be educated and informed about supporting their children's education in home settings.

Based on the findings of this study, various suggestions were made to meet the expectations of parents from school administrators and teachers. It is seen that children with special needs need more instructional adaptation because they experience more attention and focus problems than their peers who typically develop in virtual courses. In these respects, it can be ensured that teachers receive in-service training on subjects such as instructional adaptations and instructional strategies. To increase the participation of children with special needs in education in situations that prevent the normal flow of life, such as a pandemic, virtual support education activities can be planned to continue in addition to the live classes in which the whole class is included. In addition, it is important to provide information and organize virtual family training to support parents by conducting needs analyses in cooperation with the guidance services in schools. Also, parents suggested that it would be mutual if service providers communicate with the families of the children who could not attend the classes by following the class attendance status of the children, and the relevant institution for equipment and material support.

According to the findings of this research, parents had problems accessing education due to the remote execution of educational activities during the COVID-19 process. Based on this information, it can be suggested to provide free internet service and technical equipment support as a solution to the access problems experienced by parents for financial reasons. Considering the vital role of parents in the process of supporting the education of individuals with special needs, supportive measures must be taken. Parents can be supported by providing inservice training to school psychological counselors by preparing family education programs by the Ministries of Education. In addition, it may be beneficial to organize family education programs for the treatment and prevention of not only academic skills but also problem behaviors. Measures should be taken to ensure that the special education programs prepared by the Ministries of Education are announced in a way that all families can access. Preventive intervention programs should be prepared based on the problems that emerged during the pandemic process, which affected the whole world, and They should be made accessible to parents. In addition, an effective follow-up and monitoring system should be established by the Ministries of Education and a data-based system should be established for the evaluation of these children at regular intervals.

Limitations

This study is a qualitative study and implemented with nine parents who have children with special needs. The children get education in inclusive school settings. The study was conducted in Marmara region on November 2021.

Statements of Publication Ethics

For the ethical compliance of the research procedures, ethical approval was granted by the Social and Behavioral Sciences Ethics Committee, Eskişehir Osmangazi University (Reference: 202206).

Researchers' Contribution Rate

All authors took equal role about conducting this study and preparing manuscript to the publication process.

Authors	Literature review	Method	Data Collection	Data Analysis	Results	Conclusion
Author 1's name	×	⊠		×	⊠	⊠
Author2's name	×	×	×	×	×	⊠
Author 3's name	×	×	×	×	Ø	⊠
Author 4's name			×		×	⊠
Author 5' s	×	×			⊠	×

Conflict of Interest

We confirm that there are no conflicts of interest associated with this research. The research was carried out without any commercial or financial support from any legal person, institution or organization.

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