Journal of Educational Technology & Online Learning
Volume 5 | Issue 2 | 2022
http://dergipark.org.tr/jetol

Exploring Turkish special education teachers' experiences of emergency remote teaching during the COVID-19 pandemic

Elif Buğra Kuzu Demir [a], Ahmet Bilal Özbek [a], Kadir Demir [b] *

[a] Dokuz Eylul University, Turkey;
[b] İzmir Demokrasi University, Turkey;

Suggested citation: Kuzu Demir, E. B., Özbek, A. B., & Demir, K. (2022). Exploring Turkish special education teachers' experiences of emergency remote teaching during the COVID-19 pandemic. *Journal of Educational Technology & Online Learning*, 5(2), 316-335.

Article Info

Keywords:

Special education teachers
Emergency remote teaching
Experience
Covid-19

Research Article

Abstract

Individuals with special needs are highly disadvantaged during the COVID-19 quarantine days, and families and children received limited support. Learning the experiences, problems and solution suggestions of teachers who are responsible for the education of children with special needs is of great importance in determining the plans to be made to provide the necessary support. The purpose of this study is to investigate in-service special education teachers' experiences of emergency remote teaching and to seek to understand the essence of their lived experiences during the COVID-19 pandemic. This qualitative study employs a phenomenological design. This current interpretative phenomenological study consists of 21 special education teachers that meet predetermined criteria. Semi-structured interviews were used to collect the data. Five key questions and one closing question which were created by the researchers aligned with the purpose of the study were asked to the participants. As a result of the data obtained within the scope of the study, themes emerged according to special education teachers' experiences such as technical infrastructure, ICT literacy, required technical support, transformations in performance tracking and assessment, learning resource, problem behaviors, goals and objectives, family engagement, person being supported, type of support provided and decision about sustainability.

1. Introduction

Additional urgent measures in the social and economic spheres were required, after the World Health Organization declared it a pandemic disease in 2020. Shortly after, the COVID-19 pandemic, along with the closure of schools to prevent the spread of COVID-19 in the community (Abdulamir & Hafidh, 2020), has led to a dramatic transformation in how education is delivered (Elçiçek, 2021). The abrupt change from face-to-face to online learning has caused several issues for institutions and teachers in terms of redesigning the instruction their students need (Yavuz et al., 2021). Because students with disabilities are multifaceted learners with specialized requirements that coexist with their strengths, this has been relatively challenging for special education teachers (Brunsting et al., 2014). Due to characteristics of traditional special education routines such as individual education plans (IEP), classroom management practices and use of tangible materials for instructions, adaptation to remote teaching became challenging for special education teachers. In class face to face teaching requires teachers to modify every aspect of lessons according to students' individual needs and their educational performances (Kargin, 2007).

* Corresponding author. Department of Management Information Systems, İzmir Demokrasi University, Turkey.
e-mail address: kadir.demir@idu.edu.tr

Doi: http://doi.org/10.31681/jetol.1076853
Received 21 Feb 2022; Revised 22 May 2022; Accepted 23 May 2022
ISSN: 2618-6586 . This is an open Access article under the CC BY license.

Education is a collaborative process in nature involving not only teachers but also students, parents and the community. As for the continued education of individuals with special needs, parental and community involvement are of even greater importance (Warner et al., 2015). Considering this fact, it would not be incorrect to conclude that the experiences of stakeholders on the educational journey of a child with special needs are interconnected. Furthermore, the current demand for homeschooling as a result of COVID-19 pandemic has increased the importance of this interaction and the roles of adults in this interaction (Brossard et al., 2020). Children were severely affected due to the fact that schools were closed. Parents have been concerned about developmental reflections that will affect their children during this process. Parents indicated these difficulties such as change in routine, lack of special education services, limited physical space, and food-and sleep-related issues (Latzer et al., 2021). The parents, who were physically deprived of the support of special education centers and teachers, took on the roles of full-time caregivers and teachers. Teachers, like parents, faced social and professional challenges (Klavina et al., 2021). The subject of digital competencies of teachers has come to the forefront with the rise of emergency remote teaching (Khlaif et al., 2020).

2. Literature

2.1. Emergency Remote Teaching

Emergency remote teaching (ERT), rather than online education -which is well-planned and designed to be online from the beginning using an organized model- is a quick strategy used to describe teaching practices that occur in response to an emergency circumstance such as the crisis during the Covid-19 pandemic (Adedoyin & Soykan, 2020). The most important divergence point of the concept of ERT is that it arises from necessity, and that different priorities and strategies must be employed (Bozkurt & Sharma, 2020). ERT has given a significant boost to online learning due to the Covid-19 pandemic imperative and forced closure of schools, leading to the trial of new opportunities and approaches for the education system (Ferri et al., 2020). The transition from a traditional learning environment to an ERT environment, on the other hand, is frequently problematic and leaves stakeholders unprepared (Abel, 2020). It is considered important to explore the experiences of students and families with inequitable opportunity to access due to school closures and the abrupt shift to ERT (Aguliera & Nightengale-Lee, 2020).

Many studies in the literature have some criticisms for ERT, one primary factor of which is equal access to ERT environments. Agreed with Kinnunen and Georgescu (2020), who state that ERT has such a strong reliance on information and communication technology (ICT) that it reinforces the digital divide, Affouneh et al. (2020) stress that basic access necessities such as having an opportunity to use Internet and devices, being an ICT literate, connecting through a user-friendly ERT interface, and being technically supported are the main fundamentals to ensure efficiency. In addition to technical assistance, O'Keefe et al. (2020) claim that psychological, socio-cultural, academic, administrative, and professional development services are critical for learners, instructors, administrators, guides, and consultants (Genç Kumtepe et al., 2019) for developing a successful, efficient, and long-term framework in open and distance learning systems.

2.2. Remote Teaching Practices in Special Education Before and After the COVID-19

Children with special requires a more structured, more repetitive activities, explicit modeling of skills, active feedback to right and wrong responses, and systematic and consistent execution of instructional processes when compared to their peers with typical development. In this context, active utilization of the opportunities provided by technology provides convenience for teachers and contributes to the development of children's performances and learning new skills. When viewed through the lens of universal design, ICT opens a plethora of possibilities for designing a teaching process that is sensitive to individual differences (Özbek, 2021).

It is seen that the focus of the existing studies on providing special education services within the scope of distance education is geared toward individuals living in rural areas who have difficulty accessing services (Ludlow & Brannan 1999; Spooner et al., 1998). In this context, it is seen that the aim is to train staff and to increase their qualifications rather than interacting with the children directly (Bullock et al. 2008; Jung et al., 2006). Similarly, services for the needs of families and information are planned. Families require assistance to meet the needs of their children at home, to support educational services, and to solve problems that arise. In these cases, it is possible to reach experts with telerehabilitation applications (Gibbs & Toth-Cohen, 2011). Telerehabilitation studies produce effective results in areas with limited access to education for children with special needs and their parents. It has been a popular practice that has been widely used during the pandemic process (Capri et al., 2020).

2.3. Special Education in Turkey Before the COVID-19 Pandemic

Children with special needs refer to a wide heterogeneous group with a wide range of individual characteristics that differ from other diagnostic groups in terms of the severity of their disability and the areas in which they require assistance (Cook & Schirmer, 2003). Special education services are planned after a thorough examination of the characteristics of the individual with special needs. It is anticipated that by providing an individualized education, the individual will be as self-sufficient as possible. In Turkey, special education services are carried out by state-owned special education schools and private special education rehabilitation centers (Ministry of National Education, 2018). The majority of special education services are delivered through systematic intensive teaching in which students and teachers interact individually or in small groups. In Turkey, inclusion practices exist in environments where a student with special needs can receive education, such as special education practice schools, special education vocational schools, special education classes within schools, and segregated schools for students with visual and hearing impairments (Melekoglu et al., 2009). Turkey is a densely populated country, and statistics from the Ministry of National Education show that the total number of students receiving special education services in Turkey is 438.570 (National Education Statistics, 2020). A significant portion of this number, 318300 students, continue their education in general education settings under the umbrella of inclusion practices. There are 53.837 students enrolled in separate educational institutions. 66.433 people are not enrolled in any school and rely solely on private special education rehabilitation centers and private clinics for care. (National Education Statistics, 2020) There are significant differences in the development levels of cities across the country, as well as differences in access to services and limitations.

2.4. Special Education During the COVID-19 Pandemic

Individualized education is essential in the education of individuals with special needs (Kargın, 2007). For this reason, it is not possible for all children with special needs to benefit from widespread television broadcasts. Teachers should ensure that children's needs are met in this context by directing families in accordance with the individual needs of children. Considering the situation of students in special education classes in Turkey, it is seen that there are children with different levels of need in a classroom. There are children studying literacy in special education classes, as well as children with nonverbal autism spectrum disorder. Teachers are expected to prepare content for each student and deliver it to them via a distance education tool. It is not acceptable to state that there is a special requirement for a single type. Families may also differ in terms of education level, financial income, and access to opportunities. Despite efforts to keep educational services running during the pandemic, serious challenges were encountered in ensuring equal access to education for all students (Akbulut et al., 2020). This affects families playing an effective role in the education process of their children. It is common for families of children with special needs to be from lower socioeconomic groups (Skiba et.al., 2005). As mentioned in Pınarcıoğlu, Kanbak and Şiriner Önver's study (2021) Turkish families from low socioeconomic status have been facing significant challenges in gaining access to ERT, such as less well equipped in terms of technological devices both in numbers and in quality.

During the pandemic process in Turkey, learning content for the curriculum was provided by broadcasting with TV channels for all education levels developed by the Ministry of National Education. Similarly, content for families and children was prepared and presented as TV broadcasts to support the development of children from different diagnosis groups prepared by special education teachers. However, attention span is one of the most significant issues with children with developmental disabilities, learning disabilities, or autism spectrum disorder is attention span (Ferretti, 2019). Students' attention-related problems are an obstacle for them to benefit from the distance education they spend in front of the screen. As a result, the impact of TV broadcasts, especially those without direct contact, on children with special needs is thought-provoking. To attract students' attention in the classroom, teachers use strategies such as symbol reinforcers, classroom rules, and verbal triggers. They are deprived of these opportunities in distance education. The use of hints in instruction, physical assistance, modeling, and sign hint forms necessitates the presence of both the teacher and the student in the same setting. As a result, special education teachers found it difficult to collaborate with students via computers in distance education. It was observed that experts in the field and service provider organizations were attempting to assist families by coordinating information events on the education of children with special needs from different sources, including social media, during this process since field applied studies could not be conducted (Sani-Bozkurt et al., 2021).

2.5. Aim of the Study

Findings from the studies conducted in different countries show that individuals with special needs are highly disadvantaged during the COVID-19 quarantine days, and families and children received limited support (Dickinson et al., 2020; Jalali et al., 2020; Mbazzi et al., 2021; Simo-Pinatella et al., 2021). Learning the experiences, problems and solution suggestions of teachers who are responsible for the education of children with special needs is of great importance in determining the plans to be made in order to provide the necessary support.

The purpose of this study is to investigate in-service special education teachers' essence of their lived ERT experiences during the COVID-19 pandemic. Based on the idea of van Manen (1990; cited in Wilson, 2015) that phenomenological studies should open or extend a conversation that continues to push the boundaries of what is poorly defined and lacks conceptualization, the study focuses on special education teachers' (1) experiences related to all aspects of ERT such as infrastructure, accessibility of online platforms for ERT, transformation in teaching and learning process, social-cultural and psychological support services and (2) perspectives on sustainable online education based on their lived experiences. The following research questions were created to reveal these points.

- What are special education teachers' ERT experiences regarding access and infrastructure during the pandemic period?
- What are special education teachers' ERT experiences regarding teaching and learning process during the pandemic period?
- What are special education teachers' ERT experiences regarding social, cultural, and psychological support services during the pandemic period?
- What are special education teachers' ERT experiences regarding sustainability during the pandemic period?

3. Methodology

3.1. Research Design

A phenomenological design is employed in this qualitative research. A phenomenological design is a qualitative research design used to explore the meanings of the perceptions or lived experiences of a phenomenon generated by the participants and to collect in-depth knowledge about these meanings (Patton,

2001; van Manen, 1990). there are two approaches followed in phenomenological studies: descriptive phenomenology and interpretative phenomenology (Moustakas, 1994; van Manen, 1990). While both approaches share the same epistemological structure laid down by Husserl, since significant methodological differences between approaches have arisen over the years, the researchers need to be careful when choosing and naming their phenomenological approach as a research guide (Matua & van der Wal, 2014; Reiners, 2012). In this present study, interpretative phenomenological approach (IPA) was chosen because IPA aims to gain a deeper understanding of each participant's lived experience by making sense of these experiences through a reflexive process rather than simply describing the phenomenon under the study (Lee, 2020). Phenomenon may be in the form of experiences, beliefs, tendencies, and concepts (Yıldırım & Şimşek, 2018). The phenomenon investigated in this present study is the lived experiences of in-service special education teachers related to ERT during COVID-19 pandemic.

3.2. Participants of the Study

Due to the nature of a phenomenological study, participants should be selected from individuals with significant and meaningful experience of the phenomenon being investigated (Moustakas, 1994). Thus, participants of the study were recruited through two types of purposive sampling with a combination of criterion sampling and snowball sampling. Predetermined inclusion criteria for the participants to meet in this study were that the special education teachers are (1) currently in-service at a special education center in Turkey and (2) carrying out ERT activities for children with disabilities during the COVID-19 pandemic. Based on snowball sampling, participants were asked whether they could recommend potential participants who could volunteer to participate in this research and met the predetermined inclusion criteria. Related literature on sampling in phenomenological studies indicates that the number of participants may vary between 5 and 25, depending on the phenomenon observed and the phenomenological approach chosen in the research (Creswell, 2007; Polkinghorne, 1989, cited in Saban & Ersoy, 2017). This current interpretative phenomenological study consists of 21 special education teachers that meet predetermined criteria. Demographics of the participants are shown in Table 1.

Table 1.

Participant Demographics

Variable	**Level**	**Total (n=21)**
Age		M= 27.04 (SD= 4.08)
Gender	Female	%61.9 (13)
	Male	%38.1 (8)
Experience	Years in current school	M= 4.28 (SD= 2.84)
		M= 2.76 (SD= 1.51)
Highest Degree Obtained	Bachelor's degree	%90.5 (19)
	Master's Degree	%9.5 (2)
School Type	Private	%52.4 (11)
	State	%47.6 (10)
Digital Literacy*		M= 3.57 (SD= .67)
Students' Diagnoses	Autism	%52.4 (11)
	Intellectual Disabilities	%42.9 (9)
	Learning Disabilities	%4.8 (1)
Severity of Disabilities	Mild	%19 (4)
	Profound	%52.4 (11)
	Severe	%28.6 (6)

Note: Teachers asked to rank their digital literacy between 1-5.

Study group consisted of 21 teachers (13 female, 8 male). All participants had bachelor's degrees (in special education) and three of them have master's degree in special education. Teachers were working with children who has mild (n=4), severe (n=11) and profound (n=6) disabilities. Diagnose groups were autism (n=11), intellectual disabilities (n=9) and learning disabilities (n=1). Only one teacher had previous distance education experience and only four teachers used any kind of distance education platform. Teachers indicated that they used cellphones and WhatsApp for communication and lessons during quarantine period. All 21 teachers were selected from different provinces of Turkey in order to able to reflect the existing situation all around the country.

3.3. Context of the Study

Data collection process was completed online through phone calls. All participants attended interviews only by voice option to answer questions asked by the interviewer on telephone.

3.4. Data Collection and Instrumentation

To reveal in-service special education teachers' lived experiences and perceptions of the phenomenon investigated in this present study, semi-structured interviews were used to collect the data. Placing the demographic questions at the beginning of the interview, five key questions and one closing question which were created by the researchers aligned with the purpose of the study were asked to the participants. Prompts were also used when needed to probe deeper responses. Interview questions were constructed based on the literature on ensuring effectiveness of instruction in distance learning environments during COVID-19 pandemic (Lemay et al., 2021; Manca & Meluzzi, 2020; O'Keefe et.al, 2020; UNESCO, 2020). Interview questions were investigating the teachers' experiences related to (1) accessibility, (2) teaching & learning process, (3) social, cultural, and psychological support services, (4) sustainability and (5) reflections related to their lived experiences (Table 2). All the interviews were conducted through telephone, audio-recorded and transcribed verbatim by one of the researchers.

3.5. Data Analysis

The data gathered through semi-structured interviews were analyzed based on the IPA steps suggested by Smith and his colleagues (2009) with the help of NVivo software. Data analysis begins with transcribing the audio recordings from semi-structured interviews verbatim into NVivo. While transcribing each participant's data, the researcher takes notes on not only the verbal expressions of the participant but also prosodic features of the talk. Considering IPA has an idiographic, inductive and interrogative nature, Smith and his colleagues (2009) have developed a six-step approach to analysis. The first two steps are (1) reading and re-reading and (2) initial noting which are merged as indicated in the literature. As for these two steps, researchers have repeatedly read the data by taking in-depth descriptive, linguistic, and conceptual exploratory notes and commenting on the transcript of each participant in order to gain an overall understanding of the data provided and to keep the experience of the participants at the center of the analysis. Following the collection of all relevant statements, the two researchers (3) developed emergent themes for the first participant's data through a comprehensive exploratory commentary procedure. At the 4th step, the researchers (4) searched for patterns and connections between emergent themes by using an abstraction strategy in order to determine superordinate and subordinate. As for Step (5), Steps 3 and 4 were run for all the participants in turn. By the time the two researchers reached a consensus on the determination of the frequent and potent themes, the researchers finalized the data analysis process that they started together (Creswell, 2007).

3.6. Trustworthiness of the Study

Criteria related to credibility, transferability, dependability and confirmability should be met to ensure trustworthiness in a qualitative study (Lincoln & Guba, 1985). In this study several strategies for enhancing trustworthiness were used. Beyond the peer debriefing sessions that were held on a regular basis, coding accuracy was also strengthened by having two researchers code each transcript and negotiate

inconsistencies in the frequent and potent themes. Moreover, as for the credibility, member checking was utilized through sending both verbatim transcripts and emergent themes to the participants to verify the interview transcripts and to seek whether the participants' own experiences are presented within the synthesized themes by the researchers with accuracy (Birt et al., 2016). Dependability and confirmability were met by establishing an audit trail which was then reviewed by an external auditor to verify that the interpretations were indeed based on the data set, and the appropriateness of the findings (Lincoln & Guba, 1985). The external auditor was the researcher, who was not involved in the data analysis process. For ensuring the transferability, in-depth explanation of the research context, the characteristics of the participants, sampling techniques, the data collection and analysis process are provided in detail.

3.7. Ethical Considerations

All the participants were informed about the purpose and the procedure of the study, voluntary nature of the participation in addition to the procedures were used to protect confidentiality (Groenewald, 2004). Since the study was conducted during the COVID-19 pandemic, a verbal informed consent was obtained from the participants at the beginning of each online interview. Anonymity of the participants was assured by allocating a pseudonym to each participant.

4. Findings

4.1. Findings Regarding the First Research Question: Access

Teachers' responses to the first question reveal the experiences not only of teachers, but also of students in accessing distance education systems. The codes emerged from the teachers' responses to the first question yielded four subordinate themes under the superordinate theme of access (Table 2): technical infrastructure (f=55), information and communication technology (ICT) literacy (f=17) and required technical support (f=14).

Table 2.

Teachers' responses related to their experiences to accessibility

Theme	Sub-theme	Codes	f
Accessibility	Technical infrastructure	Poor network coverage Accessibility issues for required devices Low socio-ecenomic status	55
	Literacy	Low ICT literacy skills of students Dependence to low ICT literate families/caregivers	17
	Technical support	Assistance needed about use of distance education platforms Assistance needed about digitan competencies	14

Teachers argued that the technical infrastructure challenges been faced were at both the individual and public levels. Almost all the teachers (except for T3: *"I also don't have internet at home, I don't have any resources, technical infrastructure is problematic, it [referring remote teaching] wasn't very productive."*) indicated not having accessibility issues resulting from technical infrastructure individually as they already had required devices and Internet connection (f=20), but such a problem had been a fact throughout the country (f=16). On the other hand, most of the teachers (except for T4 and T19 working at private special education rehabilitation schools in metropolitan areas) reported that this was not the case for students, especially for the ones living in rural areas (f=19). ICT ownership and Internet access have been of great importance; however, it was found that families in rural areas were at a significant disadvantage due to low socio-economic status and poor network coverage. T2 explained this inequality of opportunity as follows:

"Most of our students, appr. 80% of them, come from rural areas, we have very few students from the city. Most of the students in the village do not have a smartphone… Some of them even need to go to the top for Internet coverage. The ones in the city do not have these kinds of problems."

Besides inadequate technical infrastructure, lack of ICT literacy skills is another barrier to access. Four of the teachers mentioned that their ICT skills regarding the use of digital platforms for teaching such as Education Information Network (EBA), WhatsApp, Skype and so forth were weak at the beginning. However, they also emphasized that they developed their ICT skills in a very short time by force of the challenging conditions during Covid-19 pandemic and adapted to the new situation immediately (T1: *"Well, this is my first year in the profession. I hadn't known about EBA before. A password was given to me and I entered. Then, I solved EBA with my own means by fiddling with it."*, T15: *"First I figured out how to use it, then I tried to explain it to the parents, …"*). As for the students, because of their type of disabilities and the severity of their disabilities, the teachers liaised closely with parents where possible. Eight teachers mentioned 13 times that weak ICT skills of students/families/caregivers (S/F/C) emerges as another important barrier to access since it leads inability to access the distance education platforms (T5: *"Involving families is the hardest part, both the infrastructure and the fact that they are not consciously literate is a big problem."*).

Teachers found it challenging navigating the online systems which had been hastily set up and typically supplied without any training. Thirteen teachers stated that during this transition period technical support was not provided by their institution, so that they had to overcome the technical issues (such as infrastructure and digital competencies) with their own efforts (T2: *"I did not receive any support from the institution. Just I got news from the WhatsApp group about how we should work. But nothing was done to adapt to the process."*). Only one teacher (T8) mentioned that the existing website of the institution was used as a digital content delivery platform for the in-class stakeholders who had device/internet access problems.

4.2. Findings Regarding the Second Research Question: Teaching & Learning Process

According to the teachers in this present study, their experiences related to the teaching & learning process yielded four subordinate themes (Table 3): occurrence of problem behaviors and regression (f=16), transformations in performance tracking and assessment (f=16), learning resources (f=14), intended goals and objectives (f=11) and family engagement (f=10).

Table 3.

Teachers' responses related to their experiences to teaching & learning process

Theme	Sub-theme	Codes	f
Teaching &Learning Process	Problem behaviors and regression	Lack of pyshical activity Low tolerance level of families Loss of academic and non-academic skills	16
	Performance tracking and assessment	Limitations Dissatisfaction with the assessments done by parents/caregivers Lack of feedback Lack of direct observation Opportunities Digital tools	16
	Learning resources	The changing role of families into teachers Everyday items as learning materials Digital learning materials	14
	Intended goals and objectives	Focusing on self-care skills Focusing on independent living skills Focus on preserving existing skills rather than developing new skills	11
	Family engagement		

Consistent with the related literature (Guller et al., 2021), more than half of the teachers (f=13) reported to have observed a significant increase in their students' problem behaviors during the stay-at-home period. According to the teachers, the following factors might have contributed to the emergence of problem behavior: (1) Children of all ages have been deprived of physical activity. T5 described the effect of a lack of physical activity on revealing problem behaviors by saying *"One of my students wanted to go out so bad and attempted to jump out the window. What a challenging period for them. There are several children who display problem behavior."* (2) As a result of the psychological and economic challenges caused by the Covid-19 circumstances, families' tolerance levels have decreased (T13: *"It is not easy for families to work like professionals. The increase in problem behaviors is somewhat related to the decrease in the family's tolerance. As tolerance declines, problem behavior diversifies."*). Regression was one of the unfavorable outcomes of ERT, in addition to the occurrence of problem behaviors. Three teachers reported that the students have been showing a loss of academic and non-academic skills since schools closed due to Covid-19. T14 explained this as follows: *"I believe that students are regressing, yes. There is definitely a regression, particularly among the children I taught how to read and write.",* T11: *"I believe there has been a setback, particularly in the child who used to go to school every day but now stays at home. During this time, he/she spent far too much time at home, watching TV, playing games on tablets, etc. It became increasingly difficult for them to sit in during the course. Motivation has decreased significantly."*

In terms of monitoring and evaluating student performance, teachers claimed that ERT applications have both imposed limitations (f=13) and revealed opportunities (f=3). The limitations were explained under the sub-themes of dissatisfaction with the assessments done by parents/caregivers and the lack of feedback. Nine teachers expressed dissatisfaction with the assessment done by parents/caregivers. While T4 explained her/his displeasure by focusing on the reliability of the data gathered by families ("*I ask families to mark the checklist with a plus or minus, but I'm not sure if it's a reliable follow-up*".), T10 indicated that the main barrier to an effective student evaluation has been the lack of direct observation of the student's

performance with a statement as follows: *"We are [referring teachers] now completely in the hands of the family, ... We assign a task ... They say the child did it, but we are unsure whether it was done. The problem is that we have no control over the situation."*). Four teachers reported substantial difficulties in receiving feedback from families/caregivers. Families/caregivers either do not provide feedback or provide feedback that is inadequate or misleading. T8 expressed her concern with the lack of feedback in the following quote: *"I don't feel like I'm teaching. I have no idea whether the child learned or not, whether the family did the right thing, how the child reacted, or whether the child is progressing or regressing."* On the other hand, three teachers emphasized the digitalization of performance tracking and assessment methods, which opens a new window of opportunity for alternative practices (T21: *"I send them videos that explain exactly what they need to do and how to do it. They make a video of the child performing the task and send it to me. I try to monitor the progress and give feedback. This is how we work now."*).

The sudden shift to ERT environments has necessitated a reconsideration of students' learning resources (f=14). Since Covid-19 lockdown orders made students stay at home, parents were compelled to act as teachers, organizing the students' learning environments, delivering information, monitoring their performance, and so on. T15 explained the negative consequences of this transformation in the teacher's role as follows: *"Despite the fact what is being demanded of us to be completely absurd, we continue to provide the same IEPs to parents without revising the goals. … . We are in such a scenario that the parents as practitioners are totally confused."* Six other teachers were also on the same page as T15. Besides, teachers (f=7) noted that they had to revise how instructional materials supporting students in achieving intended learning objectives were designed. While 5 teachers claimed that they replaced teaching and learning materials with everyday items, two teachers stated that they selected and used digital materials appropriate to their students' special needs. The examples of direct quotations from the teachers' responses are given as follows: T4: *"Yes, it has evolved significantly, particularly in terms of materials. For example, while performing matching activities with various materials at the institution, items such as kitchenware were used that the child could easily access, and that the family could provide at home. We mostly used materials from the family's daily life.",* T15: *"As the parents got confused, I prepared them instructional materials such as videos and pictures at home."*

As face-to-face courses were switched to online delivery, more than half of the teachers (f=11) stated that they needed to revisit the intended goals and objectives and make changes in response to recent circumstances. While four teachers stated that they focused their efforts on self-care and independent living skills for their students (T9: *"My student, a 14-year-old female student, was not doing self-care and daily life skills. We did not have an environment for this at school. She worked with her mother to cook soup, hang laundry and use a dishwasher at home. We made her acquire a very different skill.")*, four teachers stated that they did not attempt to acquire new skills for their students, but rather maintained their existing skills (T3: *"We were already beyond the goals when I had the kids, ..., we worked on the same goals over and over instead of learning new skills.")*. Furthermore, even though three teachers mentioned that they revised the intended goals and the objectives appropriate to the current circumstances, they did not clarify the essence of the change.

Aside from the constraints noted above, almost half of the teachers (f=10) highlighted a promising side effect thanks to the ERT applications, which is improved family engagement. The examples of direct quotations from the teachers' responses regarding the family engagement are given as follows: T11: *"My relationships with the parents are better now, and I think they have become more aware. They fell into a sudden rush (referring to them becoming teachers at home) and this rush raised their awareness. I believe they now have a better understanding of their children. The questions they ask are more significant and of higher quality.",* T4: *"I believe our relationship with the parents has improved significantly. There were moments when they acknowledged us to be right, when they were able to better monitor their children, …"*

4.3. Findings Regarding the Third Research Question: Social, Cultural and Psychological Support Services

According to the findings, there were eight teachers who stated that they did not receive any form of assistance (Table 4).

Table 4.

Teachers' responses related to their experiences to social, cultural and psychological support services

Theme	Sub-theme	Codes	f
Support Services	Psychological support for S/F/C	School guidance Teachers' personal attempt	10
	Socio-cultural support for S/F/C	Out-of-school activitiesLive boradcasts of experts	
	Administrative support	Information abot changing laws and regulations	18
	Techno-pedagogical support	Shared digital materials ERT learning environments	10

Two of the participants remained silent on the subject. Only eight teachers as the ERT practitioners mentioned that they received administrative (f=8) and techno-pedagogical (f=2) support. According to the findings, administrative support they experienced included being informed about changing laws and regulations regarding the on-going ERT process across the country, current decisions made by the Republic of Turkey Ministry of National Education, and by the institution. T1 explained administrative support as follows: *"Weekly updates were being sent via WhatsApp by principal and assistant principal, and we were informed of live courses that we needed to alert the parents about. The administrators were able to convey information about the procedure in this way".* Techno-pedagogical support consisted of (1) determining and sharing the digital resources (such as activity sheets, instructional videos, etc.) appropriate to the students collaboratively with the other colleagues and (2) rearranging the teaching environment in accordance with the emerging ERT technologies to be used. Teachers' responses to receiving techno-pedagogical support are exemplified as follows: *"A WhatsApp group was formed by the assistant principal. We talked about our experiences such as how to use Zoom, what activities are being shared and which teacher is doing what and how."* [T13], *"It was the institution's idea to put educational videos on our website; we were always talking about what we could do. We all benefit from this environment"* [T8]. However, none of the participants mentioned that there had been organized an in-service training or a professional development program on this newly emerging specific issue, ERT.

Another aspect investigated within the scope of this research question was whether S/F/C had encountered any support services. As observed from the statements of the teachers, not only the teachers but also the institutions had done their best to let the S/F/C benefit from both psychological (f=9) and socio-cultural (f=9). Only seven teachers responded to this question on the subordinate theme of psychological support. Five of these teachers claimed that, despite the fact that they were not professionals in this field, they attempted to provide psychological support with their own efforts to the S/F/C at the request of the institution administration. T2 and T9 explained this as follows: "*Since the billing due dates for the rehabilitations had arrived the administration said that we should do something for the parents in case the process takes longer than expected. So, we shared the students equally. ...*", *"Psychological support was planned to serve to the parents rather than myself. They (referring to the administration) asked us (referring teachers) to meet with the families. But, well, I am not an expert. I did it on my way"*. T11 and T18 indicated that they attempted to guide the parents by providing live broadcasts of special education experts on Instagram (T18: "I attempt to watch the broadcasts and tell my parents to do so on Instagram. They include both psychological counseling and instruction on how to help the student study at home."). Only two

teachers (T2 and T21) stated that psychological support has been provided by the school guidance and counselling services (T21: *"I'm not sure how the school guidance service is performing, but I'm not sure how active they are, and I doubt they can afford to have so many parents."*). According to the findings, even if they were of limited scope, various activities that could be classified as socio-cultural support such as celebrating online National Sovereignty and Children's Day on 23th of April (f=7), Mother's Day on 9th of May (f=1) and a students' birthday were organized by 7 teachers.

4.4. Findings Regarding the Fourth Research Question: Sustainability Insights

According to the findings, the maintenance of legal obligation for ERT across the country during emergency circumstances is the most critical factor influencing teachers' insights related to the fourth research question. All the teachers except T14 and T20 working at private special education rehabilitation schools mentioned that they would continue their ERT activities by their own efforts and conscientious commitments if the legal responsibility remains (T4: *"I will continue to support in some way as long as I have to, but I have serious concerns about efficiency.",* T7: *"I will continue to check students as long as the process continues in this manner. Of course, I expect to get tired at some point, but I feel compelled to do this conscientiously.")*. T14 and T20 stated that since private institutions pay teachers during distance education at an unsatisfactory financial level, they would be unable to continue their education activities in the following academic year, even if the legal obligation remains (T14: *"I plan not to continue. My institution has never supported me. There are also financial problems."*, T17: *"... We are not getting full salary at the moment, very low amounts. It is impossible to go on like this until September, I can't, it would be too bad."*). Aside from this circumstance, teachers' perspectives on sustainability emerged as a result of both their ongoing ERT experiences and their individual beliefs. According to the findings (Table 5), all of the teachers were skeptical about the long-term viability of ERT activities as currently implemented. So much so that, as ERT in the field of special education is contrary to the nature of field-specific practice, 12 teachers directly provided negative opinions. (T4, *"In terms of sustainability, we are embarking on a path that will undoubtedly be ineffective in terms of special education."*, T8: *"I don't think I'll last long. Things get out of hand as the process drags on."*). The underlying reasons for teachers' negative opinions were found to be that teachers who have been deprived of support services experience low motivation over time (f=5) and ERT practices cause a decline in skill acquisition (f=4). The examples of direct quotations from the teachers' responses regarding the sub-themes are given as follows: T14: *"To be honest, I am alienated from the situation. I was eager at first, but because I couldn't get support, my motivation dropped significantly."*, T19: *"I can't easily switch to teaching a new skill during this process; instead, I try to protect the existing one or stay in touch."*. However, promisingly, eight teachers expressed that sustainability could only be achieved if ERT practices are blended with traditional teaching (K2: *"Even if the children come to school, I believe that after-school activities such as distance education should continue in this manner"*) and support services mentioned in the findings of the third research question both for teachers and S/F/C are provided.

Table 5.

Teachers' responses related to their perspectives on long-term viability of ERT

Theme	Sub-theme	Codes	f
Sustainability	Not sustainable	Contrary to the nature of field-specific practice	21
		Low motivation over time	
	Conditionally sustainable	In case of providing support services	17
		In case of blending ERT practices with traditional teaching	
	Sustainable	- *	-

NOTE: No positive views on long-term vialibity of ERT

5. Conclusion and Suggestions

As a consequence of COVID-19 crisis, the sudden closure of schools has revealed the need for online systems for maintaining the teaching and learning process. It is not surprising that technological infrastructure is the key priority for accessibility, given that both students and teachers must provide required technological devices and internet access to engage in these emerging learning environments.

It is seen that families have socio-economic problems during the quarantine period. Many teachers stated that parents had limited sources of internet and technology access. Particularly multiple school age children in one home situation created the biggest issues. Insufficient internet access and the physical environment of the house are seen as the main limitations. Socioeconomic status is one of the main definitive variables of lives of children with special needs beginning from the diagnosis (Yingling et al., 2018). The access problems of the families limited the instructional activities of the teachers significantly. Many teachers stated that they informed families about how to work with their children through phone calls and messages. Infrastructure problems were found to be the greatest barrier that prevented teachers from working with their students online. Teachers stated that they used their own personal resources in terms of accessibility in this process, and that they did not receive any help in terms of digital literacy or infrastructure support. Especially families from rural areas have disadvantages in technology access. An important issue emphasized by many teachers is the difficulties experienced in rural areas. It has been found that accessibility problems of families and teachers living in rural areas are greater than families living in urban areas.

It is seen that education and training processes have undergone a transformation during the ERT period. Teachers faced the challenge of modifying their educational process during the transition to the home environment. Families' accessibility problems created an important limitation for teachers to adapt their educational activities. For this reason, teachers tried to teach parents how to work with their children by cooperation. Teachers modified their educational goals according to home environment and related skills. Teachers expressed that their level of cooperation with parents increased, and this is the only positive outcome of quarantine process for them. It is stated that during the quarantine period, special education teachers have difficulties in communicating directly with students, they rarely do online education, and the infrastructure accessibility of families are an important limitation (Simo-Pinatella et al., 2021). However, teachers stated that they could not measure the performance of the students in order to control the progress and update the goals, and they could not get feedback from the families on how the activities in the worksheets were completed. Teachers often emphasized that families' overly corrective and overly helpful attitudes undermined the quality of their activities with their children.

Teachers stated that an important expectation of parents from them, besides educational activities, is information and help in controlling problem behaviors of their children. During the quarantine period, there has been an increase in the emotional and behavioral problems of children with special needs (Guller et al., 2021). When the results are analyzed, it is clear that problem behaviors of children with special needs are on the rise, that they exhibit reactive behaviors to disruptions in their routines, and that being unable to go out triggers rage attacks. Teachers stated that families face significant difficulties as a result of this. According to research performed in many countries, families do not receive adequate help to work with their children and deal with challenges throughout the quarantine period (Canning & Robinson, 2021; Couper-Kenney & Riddell, 2021; Jalali et al., 2020; Mbazzi et al., 2021; Simo-Pinatella et al., 2021). In this context, it would not be inaccurate to state that children with special needs and their families were among those who felt the high-level harmful effects during the COVID-19 pandemic.

It is seen that the needs of teachers in the emergency remote education process are not only in the context of accessibility, technological opportunities and educational activities, but also, they need psychological support due to the intense workload and changing working conditions brought by the process. Teachers stated that they did not receive any support in this context, but that families needed support in this context

rather than themselves. It has been found that the pandemic has a psychological impact on children with special needs and their families. The pandemic increased the stress and anxiety levels of families with special needs children (Asbury et al., 2020). This situation influences the level of care that families can offer to their children. When special education teachers are unable to work individually with students, they work with their families to achieve their goals. It is claimed that depending on their degree of self-efficacy and resilience, families may participate in the process and provide help to their children under exceptional circumstances (Tsibaki, 2021). Teachers indicate that the psychological characteristics of families, as well as socioeconomic factors, vary in their ability to cope with the difficulties encountered during the process. It is seen that families do not get enough psychological support and experience significantly higher stress and anxiety than before the pandemic (Willner et al., 2020). Teachers stated that families did not receive any support and it was not possible for them to provide this support themselves. This situation stands out as a severe problem that needs to be solved. It is stated that families do not receive support during the quarantine process, and they need support to cope with the emotional problems and stress brought by the pandemic process, as well as economic and accessibility problems (Kaya & Şahin, 2021; Lake et al., 2021; Mbazzi et al., 2021; Paulauskaite et al., 2021).

All education professionals have certain habits, preferences, and beliefs regarding their profession, and therefore they may have differing views on the use of ICT in educational activities (Eickelmann & Vennemann, 2017). All of the special education teachers in the study group stated that distance education is not suitable for providing special education services and that it is against the nature of special education methods in the field. Most of the teachers justified their negative views with the difficulties they encountered in the process, accessibility problems and not being able to receive support. While the teachers defined the only positive outcome of their emergency distance education practices as being able to include the family in the educational process and increased level of cooperation, they stated that they would like to continue their studies with traditional special education methods unless there is a legal obligation. In a recent study conducted in Turkey, it is stated that families find it right to close schools, but they think that online education is not effective for students with special needs similar to teachers (Yarimkaya & Töman, 2021).

Considering the effectiveness and benefits of ERT for students with special needs, teachers stated that they concern. Attention span is one of the most significant issues with children with developmental disabilities, learning disabilities, or autism spectrum disorder (Ferretti, 2019). Students' attention-related problems are an obstacle for them to benefit from the distance education they spend in front of the screen. As a result, the impact of TV broadcasts, especially those without direct contact, on children with special needs is thought-provoking. To attract students' attention in the classroom, teachers use strategies such as symbol reinforcers, classroom rules, and verbal triggers. They are deprived of these opportunities in distance education. The use of hints in instruction, physical assistance, modeling, and sign hint forms necessitates the presence of both the teacher and the student in the same setting. For this reason, special education teachers experienced limitations in working with students via computers during ERT.

The experiences of special education teachers have also changed according to the type of institutions they work. Teachers working in private schools stated that their income decreased and that there were problems in getting their salaries on time and expressed that there was a possibility that they would not continue to serve in case of a new quarantine. These findings show that special education teachers did not receive enough support to answer families' needs during the ERT process, and they were in need of direction and guidance. Many participants emphasized honor of being a teacher and stated that they gave to support their students and families related with their character traits such as love of profession, sense of responsibility and conscientiousness.

The findings show that there is a need for measures to be taken in order to continue the special education services in a qualified way in case of a possible transition to distance education (Yakar, 2021). The most fundamental problem is the families' lack of technological opportunities and inadequacy of infrastructure.

In this context, it is necessary to prepare action plans specific to schools. The limitations expressed by teachers from different parts of the country are specific to their schools and regions. In this context, it is necessary to give authority and responsibility to school administrations to identify disadvantaged families for the continuation of education and training services and to provide the necessary support to families. Practices that are tried to be carried out throughout the country do not meet the needs of families living in urban and rural areas equally. It is thought that it is important for each institution to prepare an action plan, considering the characteristics of its employees and students. It can be stated that the problems of not being able to get institutional support, which teachers often voiced, and the lack of a roadmap for how they should manage the process, can be solved in this way.

Conducting the distance education process in an inclusive way on online learning platforms can be seen as a challenging but it is not an impossible task (Parmigiani et al., 2020). Students with special needs who study in general education settings in accordance with individualized education programs as part of inclusive education represent a particular dimension of the process. In addition to the distance education lessons, teachers needed to arrange small or individual events for their students with special needs. It created a compelling situation for teachers. It will be useful to examine how this situation is experienced in Turkey and in different countries in the world, and the difficulties experienced by students who continue their education within the inclusive education practices.

References

Abdulamir, A. S., & Hafidh, R. R. (2020). The possible immunological pathways for the variable immunopathogenesis of COVID—19 infections among healthy adults, elderly and children. *Electron J Gen Med. 2020; 17* (4): em202. https://doi.org/10.29333/ejgm/7850

Abel Jr, A. (2020). The phenomenon of learning at a distance through emergency remote teaching amidst the pandemic crisis. *Asian Journal of Distance Education, 15*(1), 127–143. http://dx.doi.org/10.5281/zenodo.3881529

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, pp. 1–13. https://doi.org/10.1080/10494820.2020.1813180

Affouneh, S., Salha, S., & Khlaif, Z. (2020). Designing quality e-learning environments for emergency remote teaching in Coronavirus crisis. *Interdisciplinary Journal of Virtual Learning in Medical Sciences, 11*(2), 135–137. https://doi.org/10.30476/ijvlms.2020.86120.1033

Aguliera, E., & Nightengale-Lee, B. (2020). Emergency remote teaching across urban and rural contexts: perspectives on educational equity. *Information and Learning Science, 121*(5–6), 461–468. https://doi.org/10.1108/ILS-04-2020-0100

Akbulut, M., Sahin, U., & Esen, A. C. (2020). More than a virus: How COVID 19 infected education in Turkey?. *Journal of Social Science Education, 19,* 30-42. https://doi.org/10.4119/jsse-3490 pp.30-42

Anyim, W. O. (2018), "Assessment of ICT literacy skills of digital library users and staff in Salem University, Lokoja, Kogi", *Library Philosophy and Practice(e-journal),* pp. 1-24.

Asbury, K., Fox, L., Deniz, E., Code, A., & Toseeb, U. (2020). How is COVID-19 affecting the mental health of children with special educational needs and disabilities and their families?. *Journal of Autism and Developmental Disorders*, 1-9. https://doi.org/10.1007/s10803-020-04577-2

Bozkurt, A., & Sharma, R. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education, 15*(April). https://doi.org/10.5281/zenodo.3778083

Bullock, L. M., Gable, R. A., & Mohr, J. D. (2008). Technology-mediated instruction in distance education and teacher preparation in special education. *Teacher Education and Special Education, 31*(4), 229–242. https://doi.org/10.1177/0888406408330644

Brossard, M., Cardoso, M., Kamei, A., Mishra, S., Mizunoya, S., & Reuge, N., (2020). Parental engagement in children's learning: insights for remote learning response during COVID-19. Innocenti Research Briefs no. 2020-09. UNICEF Office of Research - Innocenti, Florence. https://www.unicef-irc.org/publications/pdf/IRB%202020-09%20CL.pdf

Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 681-711.

Canning, N., & Robinson, B. (2021). Blurring boundaries: the invasion of home as a safe space for families and children with SEND during COVID-19 lockdown in England. *European Journal of Special Needs Education*, 36(1), 65-79. https://doi.org/10.1080/08856257.2021.1872846

Caprì, T., Nucita, A., Iannizzotto, G., Stasolla, F., Romano, A., Semino, M., ... & Fabio, R. A. (2020). Telerehabilitation for improving adaptive skills of children and young adults with multiple disabilities: a systematic review. *Review Journal of Autism and Developmental Disorders*, 1-9. https://doi.org/10.1007/s40489-020-00214-x

Cook, B. G., & Schirmer, B. R. (2003). What Is special about special education?: Overview and analysis. *The Journal of Special Education, 37*(3), 200–205. https://doi.org/10.1177/00224669030370031001

Couper-Kenney, F., & Riddell, S. (2021). The impact of COVID-19 on children with additional support needs and disabilities in Scotland. *European Journal of Special Needs Education*, 36(1), 20-34. https://doi.org/10.1080/08856257.2021.1872844

Dickinson, H., Smith, C., Yates, S., & Tani, M. (2020). *Not even remotely fair: Experiences of students with disability during COVID-19.* Melbourne: Children and Young People with Disability Australia. Retrieved from. https://www.cyda.org.au/ resources/details/172/not-even-remotely-fair-experiences-of-students-with-disability-during-covid-19-full-report

Eickelmann, B., & Vennemann, M. (2017). Teachers 'attitudes and beliefs regarding ICT in teaching and learning in European countries. *European Educational Research Journal*, 16(6), 733-761. https://doi.org/10.1177%2F1474904117725899

Elçiçek, M. (2021). Tendencies in Turkey-based academic studies on distance education during the covid-19 pandemic. *Journal of Educational Technology & Online Learning, 4*(3), 406-417. http://doi.org/10.31681/jetol.916038

Ferretti, R. P. (2019) Problem-solving and working memory in people with intellectual disabilities: An historical perspective. JL Matson (Ed.) *Handbook of intellectual disabilities.* Springer, Cham, pp 61–71. https://doi.org/10.1007/978-3-030-20843-1

Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies, 10*(4), 1–18. https://doi.org/10.3390/soc10040086

Genç Kumtepe, E., Toprak, E., Öztürk, A., Tuna Büyükköse, G., Kılınç, H., & Aydın Menderis, İ. (2019). Support services in open and distance learning: A model proposal from local to global. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 5*(3), 41-80.

Gibbs, V., & Toth-Cohen, S. (2011). Family-centered occupational therapy and telerehabilitation for children with autism spectrum disorders. *Occupational Therapy in Health Care, 25*(4), 298-314. https://doi.org/10.3109/07380577.2011.606460

Guba, E. (1981) Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Researc*h and Development, 29(2), 75–91. https://doi.org/10.1007/BF02766777

Guller, B., Yaylaci, F., & Eyuboglu, D. (2021). Those in the shadow of the pandemic: impacts of the COVID-19 outbreak on the mental health of children with neurodevelopmental disorders and their parents. *International Journal of Developmental Disabilities*, 1-13. https://doi.org/10.1080/20473869.2021.1930827

Jung, L. A., Galyon-Keramidas, C., Collins, B., & Ludlow, B. (2006). Distance education strategies to support practica in rural settings. *Rural Special Education Quarterly, 25*(2), 18–24. https://doi.org/10.1177/875687050602500205

Kargın, T. (2007). The process for educational assessment and individualized education programme. *Ankara University Faculty of Educational Sciences Journal of Special Education, 8*(01), 1-15. https://doi.org/10.1501/Ozlegt_0000000103

Kaya, A., & Sahin, C. H. (2021). 'I did not even receive even a phone call from any institution!': experiences and recommendations related to disability during COVID-19. *International Journal of Developmental Disabilities,* 1-9. https://doi.org/10.1080/20473869.2021.1978268

Khlaif, Z. N., Salha, S., Affouneh, S., Rashed, H., & ElKimishy, L. A. (2020). The Covid-19 epidemic: Teachers' responses to school closure in developing countries. *Technology, Pedagogy and Education,* 1–15. https://doi.org/10.1080/1475939X.2020.1851752

Kinnunen, J., & Georgescu, I. (2020). Disruptive pandemic as a driver towards digital coaching in OECD countries. *Romanian Journal for Multidimensional Education, 12,* 55–61. https://doi.org/10.18662/rrem/12.2Sup1/289

Klavina, Ng., K., Ferreira, A., Barrett, J. P., Pozeriene, U., Reina, J., … Barrett, U. (2021). Teachers' preparedness to deliver remote adapted physical education from different European perspectives: Updates to the European standards in adapted physical activity. *European Journal of Special Needs Education*, *36*(1), 98–113. https://doi.org/10.1080/08856257.2021.1872848

Lake, J. K., Jachyra, P., Volpe, T., Lunsky, Y., Magnacca, C., Marcinkiewicz, A., & Hamdani, Y. (2021). The wellbeing and mental health care experiences of adults with intellectual and developmental disabilities during COVID-19. *Journal of Mental Health Research in Intellectual Disabilities*, 14(3), 285-300. https://doi.org/10.1080/19315864.2021.1892890

Lee, A. (2020). An (interpretive) phenomenological analysis of nursing professions experience of developing a transnational curriculum. *Nurse Education Today, 84*(2020), 104.251. https://doi.org/10.1016/j.nedt.2019.104251

Lemay, D. J., Doleck, T., & Bazelais, P. (2021). Transition to online teaching during the COVID-19 Pandemic. *Interactive Learning Environments,* 1-11. https://doi.org/10.1080/10494820.2021.1871633

Lincoln, S. Y., & Guba, E. G. (1985). *Naturalistic inquiry.* Thousand Oaks: Sage.

Lipton, J. (2021). Teachers' experiences with emergency remote teaching during the COVID-19 pandemic.

Ludlow, B. L., & Brannan, S. A. (1999). Distance education programs preparing personnel for rural areas: Current practices, emerging trends, and future directions. *Rural Special Education Quarterly*, 18(3–4), 5–20. https://doi.org/10.1177/8756870599018003-402

Manca, F., & Meluzzi, F. (2020). *Strengthening online learning when school are closed: The role of families and teachers in supporting students during the COVID-19 crisis.* https://read.oecd-

ilibrary.org/view/?ref=136_136615-o13x4bkowa&title=Strengthening-online-learning-when-schools-are-closed

Matua, G.A., & Van Der Wal, D. M. (2015). Differentiating between descriptive and interpretive phenomenological research approaches. *Nurse Researcher. 22*, 6, 22-27. https://doi.org/10.7748/nr.22.6.22.e1344

Mbazzi, F. B., Nalugya, R., Kawesa, E., Nimusiima, C., King, R., Van Hove, G., & Seeley, J. (2020). The impact of COVID-19 measures on children with disabilities and their families in Uganda. *Disability & Society*, 1-24. https://doi.org/10.1080/09687599.2020.1867075

Melekoglu, M. A., Cakiroglu, O., & Malmgren, K. W. (2009). Special education in Turkey. *International Journal of Inclusive Education*, *13*(3), 287-298. https://doi.org/10.1080/13603110701747769

Ministry of National Education (2018). *Special Education Services Regulation* (Number: 30471). https://orgm.meb.gov.tr/meb_iys_dosyalar/2018_07/09101900_ozelegitim hizmetleriyonetmeligi07072018.pdf

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, Sage.

National Education Statistics (2020). *Formal Education 2019/2020.* Ministry of National Education. http://sgb.meb.gov.tr/istatistik/meb_istatistikleri_orgun_egitim_2017_2018.pdf

Patton, M. Q. (2001). *How to use qualitative methods in evaluation* (3rd Ed.). Newbury Park, Sage.

Pınarcıoğlu, N. Ş. , Kanbak, A. & Şiriner Önver, M. (2021). Covid-19 pandemisi sürecinde kırsal-kentsel ve sosyo-ekonomik farklılıkların uzaktan eğitime etkisi. *MSGSÜ Sosyal Bilimler* , *1*(23) , 28-48. https://dergipark.org.tr/en/pub/msgsusbd/issue/69550/1107748

O'Keefe, L., Rafferty, J., Gunder, A., & Vignare, K. (2020). *Delivering high-quality instruction online in response to COVID-19: Faculty playbook.* Every Learner Everywhere. http://olc-wordpress-assets.s3.amazonaws.com/uploads/2020/05/Faculty-Playbook_Final-1.pdf

Özbek, A. B. (2021). Development of and user experience with the comprehension strategies mobile app (COSMA). *Learning Disabilities: A Contemporary Journal, 19*(2), 189-206.

Parmigiani, D., Benigno, V., Giusto, M., Silvaggio, C., & Sperandio, S. (2020). E-inclusion: Online special education in Italy during the Covid-19 pandemic. *Technology, Pedagogy and Education*, 1-14. https://doi.org/10.1080/1475939X.2020.1856714

Paulauskaite, L., Farris, O., Spencer, H. M., EPICC-ID group, & Hassiotis, A. (2021). My son can't socially distance or wear a mask: how families of preschool children with severe developmental delays and challenging behavior experienced the COVID-19 Pandemic. *Journal of Mental Health Research in Intellectual Disabilities*, *14*(2), 225-236. https://doi.org/10.1080/19315864.2021.1874578

Sambhanthan, A. (2022). A Glossary of Business Sustainability Concepts. In I. Management Association (Eds.), *Research Anthology on Agile Software, Software Development, and Testing* (pp. 67-83). IGI Global. https://doi.org/10.4018/978-1-6684-3702-5.ch005

Sani-Bozkurt, S., Bozkus-Genc, G., & Yildiz, G. (2021). Reflections of covid-19 pandemic on autism spectrum disorder: A descriptive case study. *Journal of Qualitative Research in Education, 25*, 28-50. https://doi.org/10.14689/enad.25.2

Simó-Pinatella, D., Goei, S. L., Carvalho, M., & Nelen, M. (2021). Special education teachers' experiences of addressing challenging behaviour during the pandemic. *European Journal of Special Needs Education*, 1-14. http://dx.doi.org/10.1080/08856257.2021.1963152

Skiba, R. J., Poloni-Staudinger, L., Simmons, A. B., Renae Feggins-Azziz, L., & Chung, C.-G. (2005). Unproven links: Can poverty explain ethnic disproportionality in special education? *The Journal of Special Education*, *39*(3), 130–144. https://doi.org/10.1177/00224669050390030101

Spooner, F., Spooner, M., Algozzine, B., & Jordan, L. (1998). Distance Education and Special Education: Promises, Practices, and Potential Pitfalls. *Teacher Education and Special Education, 21*(2), 121–131. https://doi.org/10.1177/088840649802100206

Tokatly Latzer, I., Leitner, Y. ve Karnieli-Miller, O. (2020). Core experiences of parents of children with autism during the COVID-19 pandemic lockdown. *Autism*, 1362361320984317. https://doi.org/10.1177/1362361320984317

Tsibidaki, A. (2021). Anxiety, meaning in life, self-efficacy and resilience in families with one or more members with special educational needs and disability during COVID-19 pandemic in Greece. *Research in developmental disabilities*, *109*, 103830. https://doi.org/10.1016/j.ridd.2020.103830

UNESCO. (2020). *COVID-19 response – Remote learning strategy: Remote learning strategy as a key element in ensuring continued learning.* COVID-19 Global Education Coalition, UNESCO. https://en.unesco.org/sites/default/files/unesco-covid-19-response-toolkit-remote-learning-strategy.pdf

van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. SUNY Press. https://doi.org/10.4324/9781315421056

Warner, K., Hull, K., & Laughlin, M. (2015). "The role of community in special education: A relational approach." *Interdisciplinary Connections to Special Education: Important Aspects to Consider, 30* (A): 151–166. http://dx.doi.org/10.1108/S0270-40132015000030A008

Willner, P., Rose, J., Stenfert Kroese, B., Murphy, G. H., Langdon, P. E., Clifford, C., ... & Cooper, V. (2020). Effect of the COVID-19 pandemic on the mental health of carers of people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, *33*(6), 1523-1533. https://doi.org/10.1111/jar.12811

Wilson, A. (2015). A guide to phenomenological research. *Nursing Standard,* 29: 38–43. https://doi.org/10.7748/ns.29.34.38.e8821

Yakar, L. (2021). The effect of emergency remote teaching on the university students' end-of-term achievement. *Journal of Educational Technology & Online Learning, 4*(3), 373-390. http://doi.org/10.31681/jetol.957433

Yarımkaya, D., & Töman, U. (2021). Exploring Turkish parents' lived experiences on online science lessons of their children with mild intellectual disability amid the COVID-19 pandemic. *International Journal of Developmental Disabilities*, 1-10. https://doi.org/10.1080/20473869.2021.1922242

Yavuz, M., Kayalı, B. & Tutal, Ö. (2021). Trend of distance education research in the covid-19 period: A bibliometric and content analysis. *Journal of Educational Technology & Online Learning, 4*(2), 256-279. http://doi.org/10.31681/jetol.922682

Yingling, M. E., Hock, R. M., & Bell, B. A. (2018). Time-lag between diagnosis of autism spectrum disorder and onset of publicly-funded early intensive behavioral intervention: Do race–ethnicity and neighborhood matter? *Journal of Autism and Developmental Disorders, 48*(2), 561–571. https://doi.org/10.1007/s10803-017-3354-3

Appendix 1.

Participants' Information

Participant	Sex	Age	School Area	School Type	Experience	Students' Disability Severity
T1	F	24	Urban	State	2	Profound
T2	M	25	Rural	Private	3	Profound
T3	F	28	Rural	State	5	Mild
T4	M	26	Urban	Private	4	Profound
T5	M	26	Urban	Private	5	Severe
T6	M	27	Rural	State	4	Profound
T7	F	23	Rural	State	1	Profound
T8	F	25	Urban	Private	3	Mild
T9	F	26	Rural	State	3	Severe
T10	M	28	Urban	State	5	Profound
T11	F	24	Rural	Private	2	Profound
T12	F	24	Urban	Private	2	Severe
T13	F	26	Urban	Private	3	Severe
T14	F	26	Rural	State	4	Profound
T15	F	25	Rural	State	3	Profound
T16	F	30	Urban	Private	7	Profound
T17	F	28	Urban	Private	4	Mild
T18	M	29	Urban	Private	6	Mild
T19	F	27	Urban	Private	4	Profound
T20	M	28	Rural	State	5	Severe
T21	M	43	Rural	State	15	Severe