

**PARENTS' VIEWS ABOUT THE IMPACTS OF COVID-19 ON
INDIVIDUALS WITH SPECIAL NEEDS: THE CASE OF TURKEY¹**

*COVID-19'UN ÖZEL GEREKSİNİMLİ BİREYLER ÜZERİNDEKİ ETKİSİNE
İLİŞKİN EBEVEYN GÖRÜŞLERİ: TÜRKİYE ÖRNEĞİ*

Hatice ŞENGÜL ERDEM*, **Halil SELİMOĞLU****,
Yeşim FAZLIOĞLU***, **Sevgi Melis AKYÜREK******

*Geliş Tarihi: 04.09.2022
(Received)*

*Kabul Tarihi: 12.05.2023
(Accepted)*

ABSTRACT: This study investigates the impacts of the COVID-19 pandemic on the lives of individuals with special needs. In the research carried out with phenomenological research design, data were obtained through an online questionnaire consisting of open-ended questions developed by researchers from 121 parents with children with special needs, living in 14 different cities in Turkey. From the content analysis of the data, eight themes were identified, namely, education, health, social life, behavioral-emotional adaptation, physical condition, family communication, indoor activities and social supports and needs. According to the findings, parents mostly stated that during the pandemic process, (a) social lives of children with special needs were restricted, (b) their daily routines were disturbed, (c) they could not benefit efficiently from distance learning, (d) their behavioral problems such as tantrums and harming themselves and others (e.g., parents) were increased, (e) negative physical situations emerged, such as weight gain / loss, sleep disorders, stress related problems in family communication. In addition, parents indicated that they did indoor activities with their children and that they did not have difficulties in accessing health services for their children. The majority of the parents stated that they needed psychological counseling, distance education services, financial support. Finally, parents expressed that they had received the greatest support from their family members and teachers.

Key Words: COVID-19 pandemic, individuals with special needs, parents, social and emotional effects, health and education services, needs and supports.

¹ This study was approved by the Trakya University Social Sciences and Humanities Research Ethical Committee dated on December, 11th 2020 with the decision number of 2020.08.13. This study was presented in VIIIth International Eurasian Educational Research Congress on 7-10 July 2021.

* Dr. Öğr. Üyesi, İstanbul Medeniyet Üniversitesi, hatice.erdem@medeniyet.edu.tr, ORCID: 0000-0003-2933-8198.

** Uzman, MEB, haliselimoglu@gmail.com, ORCID: 0000-0002-1144-1923.

*** Prof. Dr., Trakya Üniversitesi, yesimfazlioglu@trakya.edu.tr, ORCID:0000-0002-3970-7084.

**** Klinik Psikolog, melisakyurek@gmail.com, ORCID: 0000-0002-2072-8344.

ÖZ: Bu araştırma, COVID-19 pandemisinin özel gereksinimli bireylerin yaşamlarına etkisi araştırmıştır. Fenomonolojik desen ile yürütülen araştırmada veriler, araştırmacılar tarafından geliştirilen açık uçlu sorulardan oluşan bir çevrimiçi görüşme formuyla Türkiye'nin 14 farklı ilinden özel gereksinimli çocuğu olan 121 ebeveyninden toplanmıştır. Verilerin içerik analizi sonucunda eğitim, sağlık, sosyal yaşam, davranışsal-duygusal uyum, fiziksel durum, aile içi iletişim, ev içi aktiviteler, sağlanan sosyal destekler ve ihtiyaçlar olmak üzere 8 temaya ulaşılmıştır. Bulgulara göre ebeveynler, özel gereksinimli çocukların pandemi sürecinde en fazla (a) sosyal yaşamlarının kısıtlandığını, (b) günlük rutinlerinin bozulduğunu, (c) uzaktan eğitimden yeterince verim alamadıklarını, (d) öfke krizleri ile kendine ve başkasına (örn., ebeveynler) zarar verme gibi davranış sorunlarının arttığını, (e) kilo alma/verme ve uyku düzeni bozulması gibi olumsuz fiziksel durumların ortaya çıktığını ve aile içi iletişimde stresin arttığını belirtmişlerdir. Ayrıca, ebeveynler çocukları ile ev içi aktiviteler yapabildiklerini ve çocukları ile ilgili sağlık hizmetlerine erişimde zorluklar yaşamadıklarını ifade etmişlerdir. Ebeveynlerin büyük çoğunluğu psikolojik danışma, uzaktan eğitim hizmetleri ve maddi desteğe ihtiyaç duyduklarını belirtmişlerdir. Son olarak, ebeveynler, en büyük desteği aile üyelerinden ve öğretmenlerden gördüklerini ifade etmişlerdir.

Anahtar Kelimeler: COVID-19, özel gereksinimli bireyler, ebeveyn, sosyal ve duygusal etkiler, sağlık ve eğitim hizmetleri, destek ve ihtiyaç.

1. INTRODUCTION

Pandemic is defined as an “extensive epidemic”, “affecting a very wide area and usually a large proportion of the population” and “distributed or occurring widely throughout a region, country, continent or globally” (Morens et al., 2009, 1018). According to the World Health Organization (WHO), during a pandemic in a situation where the global human population has little or no immunity, the virus undergoes an adaptation process after its emergence and spreads effectively among humans (WHO, 2011).

The last epidemic event of today is the COVID-19 pandemic caused by the SARS-CoV-2 virus. Following the official declaration of a pandemic due to the global spread and seriousness of the disease (Açıkgöz & Günay, 2020), various measures have been taken in many countries to reduce the spread and effects of the epidemic, from education to health, from working life to social life (Bağ & Sade, 2020). In our country, many regulations have also been made that affect mostly social life, such as stopping educational activities at schools, restricting access to many services, imposing partial and full-time curfews (Turkish Medical Association [TMA], 2020).

It is stated that individuals with special needs (United Nations [UN], 2020) are the ones who are most affected by these measures taken regarding social life. Even under normal conditions, the participation of these individuals in health services (Vergunst et al., 2017; Özata & Karip, 2017), education (Sart et al., 2016), employment and society (WHO, 2011) are quite low. The COVID-19 has made this situation more serious and has disproportionately deepened the existing problems directly and indirectly (UN, 2020).

As a result of the cessation of face to face education in all public and private educational institutions connected to the Ministry of National Education (MoNE) in Turkey, a total of 398815 students attending 1,489 public education institutions providing special education services (Ministry of National Education [MoNE], 2019) and hundreds

of thousands of individuals benefiting from support education were excluded from face-to-face education and rehabilitation activities. Online-distance education activities in Turkey are carried out via Education Information Network [EBA] and TRT EBA applications within the scope of distance education measures (MoNE, 2020). However, the study in which opinions on the effectiveness of distance education were obtained report that teachers, students and families found face-to-face education more effective (Atay, 2020). A bulk of studies conducted in Turkey have revealed that individuals with special needs cannot benefit enough from online education during the pandemic process due to reasons such as inadequate support services, lack of individualized education plans, methodological approaches and problems in making necessary adaptations in education and the socio-economic and cultural structure of families (Ceylan et al., 2022; Demiröz et al., 2021). In addition, the discrepancy between personal and learning characteristics of students with special needs and educational content, the incapacity of distance education to meet the needs of students with special needs (Görgün et al., 2022) were revealed as emerging findings regarding distance education. Similar results have revealed in studies conducted other countries Asbury et al., 2020; Hyseni Duraku & Nagavci, 2020; Pavlopoulou et al., 2020).

One of the concerns during the pandemic is that social distance measures and restrictions may have negative effects on children's mental health. Individuals with special needs are known to adhere strictly to their daily routines and behavioral patterns, have difficulties in understanding social rules and situations, are distracted and can be hyperactive (American Psychological Association [APA], 2013; Hallahan & Kauffman, 2006). It has been revealed that lack of routine and related uncertainties cause children to feel more anxious and restless (Patel, 2020). Individuals with special needs who stay at home for a long time experience various behavioral-emotional problems such as exposure to stimulus deficiency, excessive eating, low or irregular diet, display problem such behaviors as decrease in communication and introversion, anger, harming themselves and /or others and hyperactivity (Colizzi et al., 2020; Nonweiler et al., 2020; Stankovic et al., 2020).

The measures taken to prevent the spread of COVID-19 caused disruptions in many services such as support systems, personal assistance, psycho-social support, sign language and sensory services (UN, 2020). Considering that many individuals with special needs receive treatment services from hospitals and rehabilitation centers due to various problems (physical, vision, hearing, etc.), it is possible to state that temporarily suspending these services also prevents accessing to basic health services. UN (2020) reported that the disruptions that may result from planning restriction and mitigation measures for particularly vulnerable people at risk. Studies also emphasize the insufficiency of support services provided during the pandemic process (Hyseni Duraku & Nagavci, 2020; Kohli & Writer 2020; Narzisi, 2020; Pavlopoulou et al., 2020). Additionally, it has been shown that previous pandemic processes increased the isolation of individuals with special needs more (O'Sullivan & Bourgin, 2010). Moreover, institutions where individuals with special needs receive services are not only educational and support services but also places where they have opportunities to get out of their limited social lives, make friends with others, develop relationships, become independent and participate in social life albeit limited. It should be

kept in mind that long-term interruptions in education and training activities within the scope of pandemic measures mean more desocialization and drifting away from their existing relationships for these individuals. In the COVID-19 pandemic, the spread of the epidemic between communities is extremely rapid. Investigating the effects of such global events, which aggravate the existing gap between disadvantaged groups and other social groups, will be a guide in terms of the measures that can be taken. Because of this need, the present research aims to investigate the effects of COVID-19 pandemic on the lives of individuals with special needs in Turkey through parents' views.

2. METHOD

This part includes research design, participants, data collection tool, data collection and analysis and research ethics.

2.1. Research Design

This study aims to reveal the personal experiences of parents about the effects of the COVID-19 pandemic on their children with special needs; therefore, it was designed with the phenomenology approach, one of the qualitative research methods (Smith & Osborn, 2004; Yıldırım & Şimşek, 2011).

2.2. Participants

A total of 121 parents of individual with special needs participated the study. Critical sampling was used to recruit the participants. In this type of purposeful sampling, there is an unusual situation in this sampling and the researchers aim to reach in-depth information about the phenomenon (Creswell, 2014). Table 1 represents demographics for parents and Table 2 represents demographics for their children with special needs.

2.3. Data Collection Tool

The data of the study were collected with an online questionnaire form developed by experts from different disciplines who have many years of experience working with individuals with special needs. The first part of the questionnaire contains questions concerning demographic information about parents and their children with special needs, while the second part harbors open-ended questions aiming to delve into their experiences, for example the effects of the pandemic process on individuals with special needs, and the way parents evaluate the pandemic process, their expectations and their supporters' during this period.

Table 1. Demographics for Parents

Demographics	Variables	n	%
Gender	Female	101	83.5
	Male	20	16.5
Age	20-30	17	14
	31-40	33	27.3
	41-50	55	45.5
	51-60	15	12.4
	61-70	-	-
	71-80	1	0.8
City	Istanbul	87	72
	Edirne	9	7.4
	Gaziantep	6	5
	Sakarya	3	2.5
	Van	3	2.5
	Ankara	2	1.7
	Çanakkale	2	1.7
	Other	7	7.2
Education	Primary school	38	31.4
	Secondary school	11	9.1
	High school	27	22.3
	College	15	12.4
	Bachelor's degree	23	19
	Master's degree	6	5
	Doctoral degree	1	0.8

While preparing the questionnaire form of the study, the researchers took into account the rules of creating the questionnaire form, such as asking straightforward, focused questions, avoiding asking multidimensional questions, and encouraging detailed explanations for open-ended questions (Yıldırım & Şimşek, 2011). After taking the opinions of two experts working in the field of special education, changes were made in the questionnaire form. These changes included combining two questions, removing one questions and adding more questions to the demographic part to get more information. After the editing, online pilot study were carried out with three randomly selected families who have children with special needs through last version of the questionnaire to determine the reliability of the questions in the questionnaire form and the form was finalized.

Table 2. Demographics of Individuals with Special Needs

Demographics	Variables	n	%
Gender	Female	39	32
	Male	82	68
Age	0-5	11	9.1
	6-10	31	25.6
	11-15	29	24
	16-20	33	27.3
	21-25	8	6.6
	26-30	5	4
	31-35	2	1.7
	36-40	2	1.7
Diagnosis	Autism spectrum disorder	51	42
	Intellectual disability	39	32
	Down syndrome	15	12.5
	Attention deficit and hyperactivity disorder	8	6.6
	Physical disability	4	3.3
	Specific learning difficulty	2	1.8
	Hearing impairment	2	1.8

2.4. Data Collection and Analysis

The data of the research was collected by sending the interview form to the parents through internet during the pandemic and curfew period. The interview form was shared as Google Form and remained active during December 2020-Faburary 2021. There are two reasons for collecting data in this manner: (1) the facility of reaching participants from different geographical regions (Creswell, 2014), (2) the difficulty of reaching the participant face to face due to COVID-19 restrictions.

The data were analyzed using the inductive content analysis method (Bengtsson, 2016). In addition, the Excel program was used to calculate the frequency of the responses obtained by content analysis as well as to calculate descriptive statistics of demographic information of the participants. After the data were transferred to Excel, 20 randomly selected forms were coded by the first and the second author of the study independently of each other. Based on the recommendation about 10–25% of entire data should be multiply recoded, (O'Connor & Joffe, 2020), 20 transferred form were decided. After coding, the consensus and differences of opinions about the codes were discussed and the codes were finalized with the third author who had experience in working with children with special needs and their families. Then, the first and the second author coded 10 more interviews using these codes, and finally the inter-coder reliability was calculated and found 89%. Thus, collaboration and inter-coder reliability were used to ensure credibility (Bengtsson, 2016; Brantlinger et al., 2005). After coding, all the authors worked together in creating categories, assigning codes into categories and creating themes. After consulting with an expert in the field of

special education for code-category and theme coherence, the analyses were finalized.

2.5. Research Ethics

With regard to ethical concerns, researchers provided an informed consent form that included information about the aim of the research and stated that their participation is voluntary, data are confidential, and their anonymity is protected. The participants answered the questionnaire after they approved the consent form, which includes the purpose of the study, the benefit of participation, the principle of voluntary participation and the researchers' contact information. To ensure participants' anonymity as an ethical principle was highly considered. Protecting anonymity was provided by using code for participants as P1 for parent 1.

3. FINDINGS

There are eight themes emerged from data. These are education, health, social life, behavioral-emotional adaptation, physical condition, communication within the family, indoor activities, needs and supports. Parents are found to have positive and negative experiences about these themes. These experiences are given together with the frequency of the participants.

Theme 1. Education

The findings emerged under the theme of 'education' indicated that most of the parents thought that their children's education was negatively affected. 94 parents (79.66%) who participated in the study stated that there was a decrease in the educational performance of their children due to reasons such as the closure of schools and special education and rehabilitation centers, the content of online education not being suitable for the types and levels of their children, limited accessibility of online education and lack of interest of their children in online education.

The decline in the academic skills that have been acquired before the pandemic, the difficulties parents experienced in assuming and maintaining the role of the teacher are other negative aspects stated by parents. *"Due to the closure of the rehabilitation center, some mental and physical gains also regressed, and social relations were decreased,"* is an example of these negative effects. Another parent says, *"We were strongly affected by the pandemic. He had toilet training, but he has abandoned it now. He has stopped talking and has become completely introverted"* (P108), which shows that the decline in students' performances may occur not only in academic skills but also in basic self-care skills.

Table 3. Parents' Views Concerning the Effects of Covid-19 on Education

Theme	Example statements
Education	<p>"My daughter used to attend both a private kindergarten and a rehabilitation center. She could not go to either of them at the moment/after the pandemic. We could not benefit from distance education. The institutions from which we received training did not make any attempt to provide distance education". (P82)</p> <p>"Separation from the school that he loved caused a serious depression in my child. In addition, we could not benefit from distance education, his education was negatively affected". (P8)</p> <p>"Distance education does not suit us; we are trying to do something by ourselves and our classroom teacher supports us". (P85)</p> <p>"Unfortunately, all of her education has stopped now. We try to continue her education at home. Problems with mobility and sensory integration reappeared. Stereotypical behaviors have come back". (P75)</p> <p>"I observe my son's performance in distance education, but I see that my son listens better to his teachers in one-to-one lessons". (P81)</p> <p>"He benefits from the distance education social support program provided by our institution (NGO). He also participates in a program (distance education) organized by another foundation". (P86)</p> <p>"He cannot understand the lessons from screen (online education) because he has a mental disability". (P118)</p> <p>"We are trying to follow from EBA, not with his own will, but with our great effort, of course there is a disconnection when there is no special education". (P63)</p> <p>"He couldn't get education due to the pandemic. His obsessions increased. The lifting of the ban on disabled children (curfew) relieved us a little. But the lack of special education increases obsessions, especially in autism. The efficiency obtained is better through a teacher (rehabilitation) than through parents". (P23)</p>

Nine parents (7.62%) stated that although they did not have difficulty in accessing distance education, they could not perceive any positive effect that they observe in face-to-face learning environments. In addition, they experienced problems due to lack of teacher control. 15 parents (12.71%) stated that they did not experience any problems with the distance education service and their children could benefit from online education.

Theme 2. Access to Health Services

The findings emerged under the theme of 'access to health services' indicated that most of the parents thought that their children had no difficulty in accessing health services. Overall 92 (80%) parents stated that they did not have any problems in accessing health services for their children during the pandemic process that they could get their children's medicines from pharmacies with their reports without going to the hospital, and that extension also was granted if the disability reports of the children expired. Among the parents' statements that further support this finding are: *"We had some trouble finding medicine, but our pharmacist met our needs"* (P11), *"We were able to buy our reported medicines from the pharmacy without going to the hospital or primary health care center"* (P23). There were also 23 parents (20%) who stated that hospital appointments and

routine controls were disrupted. One parent expressed his/her experiences as follows: *"We could not go to the controls during this process. We couldn't get our blood thyroid and heart checked"* (P70).

It has been stated that the problems arising in this area are mostly experienced by children with secondary health problems such as epilepsy and that there are challenges due to the delays in the examinations for the existing health problem and the provision of drugs. *"At the same time, we took a lot of trouble to get a report for my son, who suffers from epilepsy"* (P112) states a parent talking about limitations caused by secondary health problems.

Theme 3. Social Life

The findings emerged under the theme of 'social life' indicated that social life was the area in which the most restrictions were experienced during the pandemic process. A total of 107 parents (89.16%) who participated in the study asserted that their children's social life was negatively affected, their daily routines were disrupted and the time of exposure to the screen (computer, tablet, phone, television, etc.) increased because there were no outdoor activities such as walking, shopping and playing games. A parent's statement draws attention to the fact that the disruption in education services also restricts children's social life: *"My son had a social course and rehabilitation, he was very happy with his teachers and I feel this situation makes him sad right now"* (P21). Some parents also indicated that they had difficulty dealing with emotional reactions as a result of disruption of their daily routines. Two examples of parental opinions that reveal these emotional reactions are:

"Our space has been restricted. We only take walks around our house, but he wants to go to different places. For this reason, we experience a state of anger while entering the house after spending time in the garden" (P72); *"He has turned into a child who is bored at home and does not enjoy anything. His routine has disrupted, he has become restless, stressed and sometimes angry. He is constantly playing games on the phone because he cannot release his energy"* (P91). Another parent's opinions reveal the increase in screen exposure time: *"We have a lot of trouble in daily activities. He wants to go to the park; he wants to go out. When I do not take him out, he has a crying jag at home. He buries himself totally on the tablet and the phone and he does not want to pay attention to anything else. I try to play games with him but he does not play"* (P117).

Some parents (13) (10.83%) pointed out that their children's social life was not affected negatively. It is seen that parents who express this view have the advantages of living in a more rural area. *"Since we are in the village outside of the city, we are comfortable now"* (P36), explains a parent. There are also parents' opinions indicating that their children are not affected by the pandemic since their social lives were very limited before the pandemic depending on the type and

severity of their disability: *"We are not normally a very social family, as she has epilepsy and physical disability. It has not changed much for us"* (P110).

Theme 4. Behavioral / emotional adaptation

The findings emerged under the theme of 'behavioral/emotional adaptation' indicated that behavioral and emotional adaptation problems of children with special needs have increased in the pandemic. A total of 93 of the parents (76.85%) asserted that the pandemic had negative effects on their children's behavioral and emotional adaptations. These negative effects manifested themselves as outbursts of anger, introversion, crying jag, increase in obsessive behaviors and emotional-behavioral problems such as harming oneself and others, or the emergence of new problem behaviors. One parent mentions the change in his/her child's sleep routines: *"Introversion behaviors have increased. He has already sleep disorders, but now, since we cannot attend classes in rehabilitation centers and his sleep routine has been influenced negatively. My son is awake at night and asleep during the day"* (P8). There were also other parents dwelling on deterioration in behavioral-emotional adaptations: *"Anxiety, restlessness, self-violence behaviors increased"* (P80); *"He has turned in to an extremely aggressive and combative person; we are really having trouble keeping him at home"* (P88); and *"behaviors such as pinching, hitting and yelling have emerged"* (P104).

A total of 28 of the parents (23.15%) asserted that the pandemic did not have any negative effect on their children's behavioral-emotional characteristics. Some of the participants stated that there was no problem in their adaptation to the new process because their children were very young: *"My baby has not been affected because she is very young"* (P28).

Theme 5. Physical condition

The findings emerged under the theme of 'physical condition' indicated that during the pandemic period, changes were observed in the physical characteristics of children with special needs. Of the parents who participated in the study, 73 parents (61.40%) pointed out that the pandemic negatively affected the physical condition of their children and that these negativities manifested themselves in the form of inactivity, overeating, avoidance of exercises, excessive weight gain, sleep disorders and hyperactivity:

"He started eating a little too much to fill the emptiness inside him. That's why he has gained a little weight and he has difficulty releasing his energy, as there is not enough activity outside " (P22); *"We still have a balance problem in walking because we cannot do our sensory integration lessons"* (P40); *"He eats a lot, has gained weight and his sleep routine is disturbed"* (86); *"She lost weight because he was very fond of her school teachers"* (P106).

On the other hand 44 of the parents (38.60%) stated that the pandemic had no effect on the physical condition of their children.

Theme 6. Family communication

The findings emerged under the theme of ‘family communication’ showed that there were various opinions on how the Covid-19 pandemic affected family communication. As for the issue of communication, 35 of the parents (30.17%) stated that their family communication was negatively affected in these pandemic conditions, and issues such as stress and tension caused by staying at home, introversion in family members, and communication problems between siblings come to the fore. The following statements are some of the examples illustrating this problem:

“My husband had bypass surgery last summer. He is diabetic and deeply concerned about contracting the coronavirus. Before the pandemic, when my husband came home from work, my son opened the door to his father and they kissed each other and passed to the dining table. During the pandemic, his father does not kiss my son to protect himself, he keeps away from him, and this situation made my son feel anger with his father from time to time” (P16); “Everyone is a little bored, being stuck at home is overwhelming and frustrating” (P43); “He loves his brother very much, but he does not share anything with his brother in this process” (P75).

While 44 of the parents (37.34%) stated that the pandemic had a good effect on communication within their family, 37 of the parents (31.89%) stated that there was no change in communication within their family. Strengthening of communication as a result of increasing duration of togetherness and sharing in the family is the opinion expressed intensely by the parents:

“Our communication has increased. We spend more time together, play games, do homework” (P15); “We managed the process well, our family communication is fine, I think our family ties have strengthened” (P66); “This situation is even better for us. Because we didn’t see the father much before, now we are all happy together” (P77). Below are examples of participant views stating that pandemic conditions have not caused a significant change in communication within the family: “There is not much problem in our communication. We try to manage this process in the best possible way by being careful and understanding to each other” (P6); “Our family communication is like in normal times, there is no change” (P78).

Theme 7. Indoor activities

The findings emerged under the theme of ‘indoor activities’ indicated that parents were able to do various activities at home with their children during the pandemic process. A total of 112 parents (94.11%) stated that they did teacher-supported activities and independent academic activities and exercises, played games, did various leisure time activities, and took short walks with their children to support them at home during the pandemic process. The views of parents who were able to do various activities with their children at home are as follows:

“Besides studying, we do activities such as doing things in the kitchen, doing sports, playing games, reading books, watching dramatic plays for children on the internet, watching TV series and taking care of dogs. I plan activities on the terrace when the

weather is sunny" (P24); *"We do daily, sensory integration, and fine motor support activities, language studies, dance and free play activities"* (P40). One parent's statement demonstrates that the activities can differ according to the child's disability level: *"He has a severe intellectual disability For this reason, we do self-care and fine and gross motor activities mostly. We do these activities not within a plan, but rather as incidental teaching"* (P110).

Seven parents (5.89%) stated that they had difficulties in doing indoor activities or they were never able to have their children do them. One of them for example remarked, *"Our days go by trying to stop his tantrums. We are not able to do activities"* (P13), which is a view that shows behavioral problems of the child prevent parents from doing indoor activities.

Theme 8. Needs and supports

The findings emerged under the theme of 'needs and supports' indicated that parents needed support in many areas and received the greatest support from their families and their children's teachers.

Table 4. Parents' Views on the Effects of Covid-19 on Theme of Needs and Supports

Sub-theme	Example statements
Need for support	<p>"Whether there is an pandemic or not, my only wish is to get free psychological support in order to breathe a little bit, to be able to think correctly and share what I feel with someone else without fear and shame in the process of having a disabled person who will exist with me all my life". (P110)</p> <p>"We have no supporters. The educational process is challenging. I wish there was an interactive video training with a one-to-one teacher". (P9)</p> <p>"Financial support is of course important. However, there may be longer and more detailed educational programs so that my child does not fall behind in his education". (P40)</p> <p>"There is nobody left working in the family. I wish there was an allowance for my child's needs, because he is a very picky child, he does not eat every meal or drink every beverage. Also there are his medications we have to buy". (P81)</p> <p>"Safe areas can be created, areas which have been already disinfected and are risk free". (P102)</p>
Support resources	<p>"In this process, we were left alone too much and have not received support from anyone. The EBA program is not suitable for our children at all; education is limited. We are lagging behind in this process. Unfortunately, our only supporters are our own family members. Autistic children, who need uninterrupted education, have stayed at home during this process and it is inevitable that their obsessions will increase". (P108)</p> <p>"In this process, my biggest support is our teacher who makes our individual program and follows the process, even from a distance". (P73)</p> <p>"I think that public institutions work effectively, I especially admire and benefit from the work of the Ministry of National Education". (P66)</p>

When we asked in which areas parents need support for their children with special needs during the pandemic process, six parents (5.35%) responded that they needed counseling service and 13 parents (11.60%) stated that they needed one-to-one online education service for their children. For example one parent pointed out

the need for education and counseling, saying, *"We have no supporter. Education process is challenging. I wish there was an interactive video training with a one-to-one teacher"* (P9). 10 parents (8.92%) stated that they needed financial support. On the other hand six parents (5.35%) emphasized that safe areas should be created for children to go out. One parent said, *"If street activities could be held to entertain the children, children would be happy to watch"* (P120), indicating the need for outdoor activities or areas.

Responding to the question concerning about the support during the pandemic process, 47 parents (41.96%) explained that they did not get support from any institution or organization except from their family members, while 24 parents (21.42%) elucidated that they got the greatest support from their children's teachers. One parent remarked, *"We did not receive any support from any institution or organization except our family members. Unfortunately, no one has even asked"* (P1). Nevertheless another parent expressed his/her appreciation for the teacher support: *"My biggest supporters were our special education teachers. They were always in contact with us on social media and told me what to do. They helped me and my son a lot in this process"* (P15).

4. DISCUSSION

In current study, the effects of the Covid-19 pandemic on individuals with special needs were discussed in the framework of data collected by online questionnaire forms from parents living in different cities in Turkey. In the study, the effects of the Covid-19 on individuals with special needs were examined under the themes of education, health, social life, behavioral-emotional adaptation, physical condition, family communication, indoor activities, social support and needs. It is possible to conclude that individuals with special needs who were also a vulnerable group before the pandemic (Nonweiler et al., 2020) became more vulnerable group (Amaral & Vries 2020; Koçbekir Aid & Karamuklu, 2021; Kundakçı et al., 2022; Yakut, 2021) during the pandemic process. All areas mentioned in the themes are interconnected and affect each other.

According to the present study, negative effects of Covid-19 are mostly observed in educational services. The disruption experienced in all educational services negatively affected the educational performance and behavioral-emotional adaptation of individuals with special needs. Face-to-face education services were interrupted due to the closure of the schools, and as an alternative, the distance education system (EBA TV) and a mobile application called "I'm special, I'm in education" were used (Atlı-Yılmaz & Atlı, 2020; Yucesoy-Ozkan et al., 2020). Due to the inefficiency of these applications, the decline in academic skills that had been previously acquired in face-to-face education was emerged as a direct effect of the Covid-19 on education. It was reported that during the pandemic process, education services for children with special needs were limited, participation in

distance/online education was low and children with special needs did not benefit from online education adequately (Akdal et al., 2021; Colizzi et al., 2020; Görgün et al., 2022; Hyseni Duraku & Nagavci, 2020, Üresin vd., 2021; Yakut, 2021) that they could not maintain numerous skills that they acquired in face-to-face education in distance education. They were estranged to the school culture owing to the fact that they could not attend school in this process (Mengi & Alpdoğan, 2020), and that not being able to attend school caused stress for both parents and themselves (Asbury et al., 2020; Hyseni Duraku & Nagavci, 2020). It is emphasized that not being able to go to school, especially among children with autism spectrum disorder (ASD), causes more intense behavioral problems and that keeping in touch with school is important for these children to maintain their existing performance (Colizzi et al., 2020). The study which investigated educators' experiences working in the Special Education and Rehabilitation Centers in Turkey revealed that children with ASD were the most vulnerable group during the pandemic (Yakut, 2021). Another finding of the study related to education is the difficulties parents experience in taking up and maintaining the role of teachers, which is also supported by different studies. It was stated that parents had difficulties in meeting all educational needs of their children with special needs at home, hence, they feel overwhelmed (Asbury et al., 2020; Toseeb et al., 2020) and that they are worried that their children will lose their previously acquired skills (Hyseni Duraku & Nagavci, 2020). In Turkey, the closure of the special education and rehabilitation centers where the children with special needs receive support services outside of school engendered interruptions in support services provided in these centers such as special education and physiotherapy. It is known fact that it is very difficult to deliver these services through online platforms (Amaral & Vries, 2020).

Considering that each individual with special needs has different educational performance and needs, it is recommended that online education should be individualized and the competencies of parents be increased in providing homeschooling to their children (Asbury et al., 2020; Hyseni Duraku & Nagavci, 2020). Moreover, the ability of individuals with special needs to benefit from distance education and the ability of the parents to provide homeschooling is also inextricably linked to the type, severity of the disability and age group. Especially individuals with severe disabilities were able to benefit less from the support provided at home. A similar study conducted in Turkey (Karahan et al., 2021) examined mothers' experiences concerning their children with special needs and findings were obtained that support the results of the present study. In the aforementioned study mothers asserted that the fact their children were away from school and their peers led to some problems and that they failed to make pedagogic and material adaptations and encountered drawbacks in preparing or designing

equipment for their children. It was also stated that mothers found it challenging to prepare new routines at home for their children with ASD and had difficulty in coping with the stress and anxiety arising from this challenge (Sani-Bozkurt et al., 2021).

Sudden and radical changes in the social lives of individuals with special needs due to pandemic restrictions are another result revealed in the research. Changes in social life mostly manifested themselves as disruption of routines and loss of social relations. Studies on COVID-19 and individuals with special needs show parallelism with these findings of the research (Asbury et al., 2020; Ceylan et al., 2022; Chen et al., 2020; Hyseni Duraku & Nagavci, 2020; Koçbeker Eid & Karamuklu, 2021; Rose et al., 2020; Stankovic et al., 2020). Changes in life routine are known to cause problem behaviors, because especially individuals with ASD strictly adhere to their routines (APA, 2013) and this situation is very challenging for both these individuals and parents (Courtenay & Perera, 2020; Petri et al., 2020; Stankovic et al., 2020). Since the beginning of the pandemic, families of individuals with ASD experience difficulties in rearranging and managing daily life, and 1 out of every 3 individuals shows more severe behavioral problems (Colizzi et al., 2020) and/or the severity of their behavioral problems increases (Stankovic et al., 2020). Moreover, the finding that isolated life at home increased the duration of watching TV and using mobile devices (Chen et al., 2020; Karahan et al., 2021) supports the view that the screen exposure time increased, which is one of the effects of Covid-19 on social life. Especially mothers indicated that in the pandemic process their children lost the routines and social environment that they used to have in the pre-COVID-19 period and that they have difficulty in dealing with children's problem behaviors that emerge as a result of the increase in the duration of staying indoors and that they feel lonely (Karahan et al., 2021).

Changes in social and lifestyle as well as mood changes and decrease in levels of physical activity can be noted among the impacts of the pandemic on everyday work and functioning (Demiröz vd., 2021; Lebrasseur et al., 2021). During the pandemic process, emotional-behavioral adaptation problems of individuals with special needs emerged associated with changes such as stay-at-home restrictions, not being able to go to school, social isolation, obligatory change of daily routines and limitations in accessing social networks. It is known that individuals with special needs can have problem behaviors such as aggression directed outwardly, self-harm, agitation, sleep disorders (Ageranioti-Bélanger, et al., 2012; Summers, et al., 2017; Matson et al., 2008; Park et al., 2014; Smith & Matson, 2010); in addition, they may experience deficiencies in various levels of anxiety disorder (Van Steensel et al., 2011), emotion regulation problems (Fiona & Indianti, 2018) and communication skills (Boardman et al., 2014). Harming themselves and others and increase in destructive behaviors of individuals with

special needs during the pandemic period were stated as the most challenging behavioral problems (Asbury et al., 2020; Karahan et al., 2021). In particular, the problem behaviors of children with ASD doubled compared to the pre-pandemic, and while there was an increase in the severity of behaviors (Colizzi et al., 2020), there was also a decline in prosocial behaviors (Nonweiler et al., 2020). When it comes to individuals with special needs, the difficulty of establishing a new routine and understanding and application of these rules by children with intellectual disability increases the problem (Petri et al., 2020). In addition, in this period, it is emphasized that the limitation of accessing the resources that children receive emotional support (e.g. teachers) is another challenging factor (Hyseni Duraku & Nagavci, 2020). Mothers asserted that they employed mostly such methods as threatening, ignoring, presenting alternatives and depriving when dealing with problem behaviors that their children exhibit (Karahan et al., 2021).

One of the findings of this study is that the pandemic process does not create a noticeable change in children's lives due to living in rural areas and/or their extremely limited participation in social life because of the severity of their disability. Although there is no such finding in the literature indicating that social isolation does not make behavioral adaptation very difficult, it is stated that families have limited expectations about their children (Rose et al., 2020) and being at home is safer for children because they have difficulties at school (Asbury et al., 2020), and therefore social isolation has no negative effects.

The finding that physical health of individuals with special needs is negatively affected during the COVID-19 process is in agreement with the findings of different studies. Sedentary life during pandemic lockdown period increases the risk of obesity (Chen et al., 2020). In particular, it is stated that overweight, obesity and inactivity problems are common in individuals with ASD and these risks increase even more during the pandemic process (Yarımkaya & Esentürk, 2020). It is possible to conclude that the disruption of daily routines, anxiety, stress and introversion caused by social distancing can cause eating disorders such as undereating. As a matter of fact, studies in the literature show that the decrease in physical activity (Yaşlı et al., 2014) and eating habits (Aslan & Atilla, 2002; Uskun, 2005) causes weight problems in children. In order to reduce these risks, it is important to stay physically active during the times spent at home. This is necessary to stay healthy and keep the immune system healthy, and all these can be achieved through safe, simple and easy-to-do physical activities that can be practiced at home (Chen et al., 2020). Regular physical activities and routine exercises in a safe home environment during the pandemic process is an important strategy for a healthy life (Chen et al., 2020). It is recommended that parents wear sports clothes during the pandemic process and encourage their children with special needs for physical activities at home to stay physically healthy (Yarımkaya

& Esentürk, 2020). In order to keep children with ASD physically active in the home, the following recommendations are offered: meditation, climbing stairs, walking in the house, warm-up exercises and participating in distance exercise classes (Yarımkaya & Esentürk, 2020).

This study found that family relationships showed some changes during the pandemic process. Similarly, there are research results indicating that the stress of parents increased in quarantine and that the problems experienced among them affected children (Hyseni Duraku & Nagavci, 2020). Stress was a most experienced condition among parents during pandemic (Gürbüz, 2022). It is known that the increase in problem behaviors of their children (Baker et al., 2003; Eisenhower et al., 2011) increases the stress level of families. Mothers in Turkey underlined the fact that they have found it difficult to manage the relationships at home during the pandemic process (Karahan et al., 2021; Tekindal & Özlem, 2021). However, there are also findings indicating that the pandemic is a good opportunity, as it allows parents to participate more in their children's education process and spend more time at home with them (Ceylan et al., 2022; Çetin & Ercan, 2021; Şenol & Can Yaşar, 2020).

It is seen that the main problem experienced in the field of health during the pandemic process is the cancellation of routine control appointments. Studies carried out suggest that challenges exist in such areas as therapy, rehabilitation and access to health services in the pandemic process (Cacioppo et al., 2020; Lebrasseur et al., 2021). On the other hand, access to health services appears to be the least problematic area thanks to the decision of the General Directorate of Special Education and Guidance Services dated 15.05.2020, which extended the special education board reports for six months “in order to reduce the risk of possible transmission of COVID-19 in individuals who need special education and to prevent possible victimization of individuals who benefit from special education rehabilitation centers” ; in addition, a previous decision was taken to extend reports of the Disabled Health Board dated 19.03.2020 to ensure that these individuals do not have problems with getting their medicines and other similar supports.

In the study, parents emphasized that needs arise in different areas such as online education, consultancy and financial support during the epidemic process, and while they did not receive any support from public institutions and organizations and/or non-governmental organizations, they received the greatest support from family members and teachers of their children. This finding is supported by the findings of studies that indicate that during the pandemic process families do not receive enough support for their children, that families need support in the pandemic process for not only home health services (Colizzi, et al. 2020; Stankovic et al., 2020) but also health services to be provided by therapists, child psychiatrists and pediatricians (Stankovic et al., 2020), mental support (Asbury et

al., 2020; Toseeb et al., 2020), home education activity and material recommendations (Stankovic et al., 2020; Toseeb et al., 2020), regular structured outside home activities and activities prepared by the school (Toseeb et al., 2020). In the present study, parents stated that one of the biggest sources of support is their children's teachers. Similarly, in the study of Colizzi et al. (2020), families stated that they received the greatest support from their schools, therapists and local health services (Colizzi et al., 2020). Mothers in Turkey likewise found it beneficial that foundations supporting children with special needs should carry out parenting and guidance training sessions for families during the COVID-19 process (Karahan et al., 2021). Some studies have revealed that parents thought that their children could not get enough support from their teachers to complete given homeworks (Görgün et al., 2022).

5. CONCLUSION AND SUGGESTIONS

The result of the study shows that social lives of individuals with special needs have been negatively affected by COVID-19 and failure to provide face-to-face special education services contributes to social isolation. Ultimately, as a result of these challenges, behavioral-emotional adaptation problems arise and/or the severity of existing problems have increased. It was also noted that parents, as participants of the current study, had difficulty to manage problems in social life and felt inadequate to offer homeschooling support.

The present study has some limitations. First, although the information was collected about individuals with different special needs from different regions of Turkey, most of the families were from Marmara region of the country. This limits the generalizability of the findings. The second limitation is related to the nature of the study since the data were collected via online questionnaire. However, because of its convenience in terms of reaching a large study group safely during the pandemic period, getting fast responses, collecting data cost effectively and timely (Evans & Mathur, 2018) online data collection is the most effective method in the current circumstance.

Based on the results of the study, it will be effective to make some suggestions to reduce the effects of the pandemic. Action plans should be prepared and the continuity of special education support services should be provided with the cooperation of local administrations, non-governmental organizations and especially central administrations. "Barrier-free" areas can be designed to meet the needs of individuals with special needs such as playing in the park, walking and shopping safely. Accessibility has emerged as a more important problem than ever during the pandemic process for individuals with special needs. In addition to educational services, psychological counseling and guidance services should be made accessible for both individuals with special needs and their families. It is known that families of children with special needs face extra costs in their social

lives. The necessity for children to stay at home with their family members during the pandemic process may lead parents to become unemployed and experience financial difficulties. In order to solve this problem, providing financial support to the families can be suggested.

One of the results of the present study is that parents found it challenging to carry out education services at home and adopt the role of the teacher. It is assumed that online family training should be implemented and distance education services providing interactive training should be expanded in order to minimize this negative effect. It is essential that long-lasting solutions should be produced for individuals with special needs and their families, who constitute one of the groups that need to be supported most. It is anticipated that the results of the present study will also contribute to the identification of need areas in the field.

REFERENCES

- Açıköz, Ö., & Günay, A. (2020). The early impact of the Covid-19 pandemic on the global and Turkish economy. *Turkish Journal of Medical Sciences*, 50(SI-1), 520-526. <https://doi.org/10.3906/sag-2004-6>
- Ageranioti-Bélanger, S., Brunet, S., D'Anjou, G., Tellier, G., Boivin, J., & Gauthier, M. (2012). Behaviour disorders in children with an intellectual disability. *Paediatrics & Child Health*, 17(2), 84–88. <https://doi.org/10.1093/pch/17.2.84>
- Akdal, D., Baltacı, Ö., & Akbulut, Ö.F. (2021). The examination of the opinions of parents with children who have special needs regarding the distance education process. *International Online Journal of Education and Teaching (IOJET)*, 8(3), 1817-1832.
- Amaral, D. G., & de Vries, P. J. (2020). COVID-19 and Autism Research: Perspectives from Around the Globe. *Autism research : Official Journal of the International Society for Autism Research*, 13(6), 844–869. <https://doi.org/10.1002/aur.2329>
- American Psychiatric Association, DSM-5 Task Force. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc.. <https://doi.org/10.1176/appi.books.9780890425596>
- 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*, 51(5), 1772–1780. <https://doi.org/10.1007/s10803-020-04577-2>
- Aslan, D., & Atilla, S. (2002). Önemli bir sağlık sorunu: Şişmanlık. *Sürekli Tıp Eğitimi Dergisi (sted)*, 11(5), 169-171.
- Atay, D. (2020). Uzaktan eğitim süreci üzerine veli, öğretmen ve öğrencilerden elde edilen veriler ile ilgili araştırma bulgularının raporu. Bahcesehir University Faculty of Educational Sciences. https://docs.google.com/document/d/1Yg6DyVDFf_ZwVoMhxislU5ipztqQQm8naNgAEUqzyCg/edit#
- Atlı-Yılmaz, E., & Atlı, A. (2020). Otizm spektrum bozukluğu olan bireylerde Covid-19 pandemisinde uyulması gereken kuralların video modelle öğretilmesi [Teaching the rules to be followed in COVID-19 pandemic in individual with autism spectrum disorder by video model]. *International Journal of Social Sciences and Education Research*, 6(2), 282-293. <https://doi.org/10.24289/ijsser.756883>
- Bag, M., & Sade, G. (2020, May 16). Dünyada Covid-19: İlk 4 ayında neler yaşandı? Salgının seyri ne durumda? <https://tr.euronews.com/2020/05/04/dunyada-covid-19-salg-n-n-ilk-100-gununde-yasananlar-ilk-nerede-ortaya-c-kt-nas-l-yay-ld>.

Baker BL., McIntyre LL., Blacher J., Crnic K., Edelbrock C., & Low C.(2003). Pre-school children with and without developmental delay: behaviour problems and parenting stress over time. *Journal of Intellectual Disability Research*. 47(4-5), 217–230. <https://doi.org/10.1046/j.1365-2788.2003.00484.x>

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8–14. <https://doi.org/10.1016/j.npls.2016.01.001>

Boardman, L., Bernal, J., & Hollins, S. (2014). Communicating with people with intellectual disabilities: a guide for general psychiatrists. *Advances in Psychiatric Treatment*, 20(1), 27–36. doi:10.1192/apt.bp.110.008664

Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71(2), 195–207. <https://doi.org/10.1177/001440290507100205>

Cacioppo, M., Bouvier, S., Bailly, R., Houx, L., Lempereur, M., Mensah-Gourmel, J. ... ECHO Group (2020). Emerging health challenges for children with physical disabilities and their parents during the COVID-19 pandemic: The ECHO French survey. *Annals of Physical and Rehabilitation Medicine*, S1877-0657(20)30157-3. Advance online publication. <https://doi.org/10.1016/j.rehab.2020.08.001>

Ceylan, M., Afacan, K. & Görmez-Ceylan, M. (2022). Covid-19 döneminde zihin yetersizliği olan öğrencilerin deneyimleri hakkında ailelerin görüşleri. *Trakya Eğitim Dergisi*, 12(1), 335-350.

Chen, P., Mao, L., Nassis, G. P., Harmer, P., Ainsworth, B. E., & Li, F. 2020. Coronavirus disease (COVID-19): The need to maintain regular physical activity while taking precautions. *Journal of Sport and Health Science*, 9(2), 103–104. <https://doi.org/10.1016/j.jshs.2020.02.001>

Colizzi, M., Sironi, E., Antonini, F., Ciceri, M. L., Bovo, C., & Zoccante, L. (2020). Psychosocial and behavioral impact of COVID-19 in autism spectrum disorder: An online parent survey. *Brain Sciences*, 10(6), 341. <https://doi.org/10.3390/brainsci10060341>

Courtenay, K., & Perera, B. (2020). COVID-19 and people with intellectual disability: impacts of a pandemic. *Irish Journal of Psychological Medicine*, 37(3), 231–236. <https://doi.org/10.1017/ipm.2020.45>

Creswell, W. J. (2014). *Educational research: planning, conducting, and evaluating quantitative and qualitative research*. Pearson.

Çetin, Ş. & Ercan, T. (2021). Otizme sahip ergen öğrencilerin uzaktan eğitim deneyimlerinin ebeveyn aracılığı ile incelenmesi. *Anadolu Akademi Sosyal Bilimler Dergisi*, 3(1), 105-121.

Demiröz, K., Yıldırım, Ş., Karahan, S. & Kayhan, N. (2021). Covid-19 pandemic process experiences of the healthcare professional mothers with children with special needs. *Çukurova University Faculty of Education Journal*, 50(2), 749-777.

Eisenhower, A. S., Baker, B. L., & Blacher, J. (2005). Preschool children with intellectual disability: syndrome specificity, behaviour problems, and maternal well-being. *Journal of Intellectual Disability Research*, 49(9), 657–671. <https://doi.org/10.1111/j.1365-2788.2005.00699.x>

Evans, J.R., & Mathur, A. (2018). The value of online surveys: a look back and a look ahead. *Internet Research*, 28(4), 854-887. <https://doi.org/10.1108/IntR-03-2018-0089>

Fiona, E., & Indianti, W. (2018). Developing emotion regulation skills by emotion regulation skills system training for children with mild intellectual disability. *Jurnal Psikologi Insight*, 2(2), 51-66.

Görgün, B., Balıkcı, Ö., Öğülmüş, K., & Melekoğlu, M. A. (2022). Özel öğrenme güçlüğü olan öğrencilerin, ailelerinin ve öğretmenlerinin gözünden Covid-19 salgınında eğitim süreci. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 51(1), 237-272.

Gürbüz, M. (2022) Özel gereksinimli çocuğa sahip ailelerin salgın döneminde gerçekleştirilen uzaktan eğitim süreci hakkındaki görüşlerinin incelenmesi. *Milli Eğitim Dergisi*, 51(233), 443-460.

- Hallahan, D. P., & Kauffman, J. M. (2003). *Exceptional learners*. Introduction to special education. Pearson.
- Hyseni Duraku, Z., & Nagavci, M. (2020). *The impact of the COVID-19 pandemic on the education of children with disabilities*. <https://www.researchgate.net/publication/342282642>. doi:10.13140/RG.2.2.17807.41125.
- Karahan, S., Yildirim Parlak, S., Demiroz, K., Kaya, M., & Kayhan, N. (2021). Experiences of the mothers to cope with the problem behaviors of the children with special needs during coronavirus (COVID-19) process. *Journal of Qualitative Research in Education*, 25, 76-101. doi:10.14689/enad.25.4
- Koçbeker, B. N. & Karamuklu, E. S. (2022). Covid-19 salgını sürecinde özel gereksinimli çocuğu olan annelerin yaşadıkları güçlüklerin ve duygu durumlarının incelenmesi. *Milli Eğitim Dergisi*, 51(233), 419-442.
- Kohli, S., & Writer, S. (2020, March 30). Students with disabilities deprived of crucial services because of coronavirus closures. <http://www.latimes.com/california/story/2020-03-25/coronavirusschool-special-education>
- Kundakcı, Y. E., Gül, İ., Yeşiltaş, A. & Kundakcı, R. (2022). Covid-19 Pandemisinde özel gereksinimli çocuklar ve annelerinin deneyimleri: Nitel bir araştırma. *Sosyal Politika Çalışmaları Dergisi*, 22(54), 63-86.
- Lebrasseur, A., Fortin-Bédard, N., Lettre, J., Bussièeres, E. L., Best, K., Boucher, N. ... Routhier, F. (2021). Impact of COVID-19 on people with physical disabilities: A rapid review. *Disability and Health Journal*, 14(1), 101014. <https://doi.org/10.1016/j.dhjo.2020.101014>
- Matson, J. L., Wilkins, J., & Macken, J. (2008). The relationship of challenging behaviors to severity and symptoms of autism spectrum disorders. *Journal of Mental Health Research in Intellectual Disabilities*, 2(1), 29-44. <https://doi.org/10.1080/19315860802611415>
- Mengi, A., & Alpdoğan, Y. (2020). Covid-19 salgını sürecinde özel eğitim öğrencilerinin uzaktan eğitim süreçlerine ilişkin öğretmen görüşlerinin incelenmesi. *Milli Eğitim Dergisi*, 49(1), 413-437. <https://doi.org/10.37669/milliegitim.776226>
- Ministry of National Education (2020). *ÖÇEET-Özel çocuklarımızla eğlenceli etkinlikler takvimi*. 20.08.2021 tarihinde, <https://orgm.meb.gov.tr/www/oceet-ozel-cocuklarımızla-eglenceli-etkinlikler-takvimi/icerik/1307> adresinden erişilmiştir.
- Ministry of National Education (2019). *National education statistics 2018-2019*. Ankara: MoNE. https://sgb.gov.tr/www/icerik_goruntule.php?KNO=361
- Morens, D., M., Folkers, G., K., & Fauci, A., S. (2009). What Is a Pandemic? *The Journal of Infectious Diseases*, 200, 1018-1021. <https://doi.org/10.1086/644537>
- Narzisi, A. (2020). Handle the autism spectrum condition during Coronavirus (COVID-19) stay at home period: Ten tips for helping parents and caregivers of young children. *Brain Sciences*, 10(4), 204-207. <https://doi.org/10.3390/brainsci10040207>
- Nonweiler, J., Rattray, F., Baulcomb, J., Happé, F., & Absoud, M. (2020). Prevalence and Associated Factors of Emotional and Behavioural Difficulties during COVID-19 Pandemic in Children with Neurodevelopmental Disorders. *Children*, 7(9), 128. <https://doi.org/10.3390/children7090128>
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. *International Journal of Qualitative Methods*, 19, 1-13 <https://doi.org/10.1177/1609406919899220>
- O'Sullivan, T., & Bourgoïn, M. (2010). *Vulnerability in an influenza pandemic: Looking beyond medical risk*. White Paper funded by Public Health Agency of Canada. file:///C:/Users/hp/Downloads/OSullivanBourgoïn_2010_VulnerabilityinPandemic.pdf.
- Özata, M., & Karip, S. (2017). Engelli Bireylerin Sağlık Hizmetleri Kullanımında Yaşadıkları Sorunlar: Konya Örneği [Difficulties that disabled people have in the use of health services: Konya

example]. *Hacettepe Journal of Health Administration*, 20,(4), 397-407. <https://dergipark.org.tr/tr/pub/hacettepesid/issue/39658/469531>

Park, J. H., Kim, Y.S., Koh, Y.J., Song, J., & Leventhal, B. L. (2014). A contrast of comorbid condition and adaptive function between children with Autism Spectrum Disorder from clinical and non-clinical populations. *Research in Autism Spectrum Disorders*, 8(11), 1471–1481. <https://doi.org/10.1016/j.rasd.2014.07.014>

Patel K. (2020). Mental health implications of COVID-19 on children with disabilities. *Asian Journal of Psychiatry*, 54, 102273. <https://doi.org/10.1016/j.ajp.2020.102273>

Pavlopoulou G., Wood R., & Papadopoulos C. (2020). *Impact of Covid-19 on the experiences of parents and family carers of autistic children and young people in the UK*. UCL Research Briefing. https://discovery.ucl.ac.uk/id/eprint/10101297/3/Pavlopoulou_COVID19%20AUTISM%20FINAL%20GP.pdf

Petri J. C. M. Embregts , Kim J. H. M. van den Bogaard , Noud Frielink , Moniek A. C. Voermans, Thalen, M. & Jahoda, A. (2020): A thematic analysis into the experiences of people with a mild intellectual disability during the COVID-19 lockdown period. *International Journal of Developmental Disabilities*, 1-5. <https://doi.org/10.1080/20473869.2020.1827214>

Rezendes, D. L., & Scarpa, A. (2011). Associations between parental anxiety/depression and child behavior problems related to autism spectrum disorders: The roles of parenting stress and parenting self-efficacy. *Autism Research and Treatment*, 395190. <https://doi.org/10.1155/2011/395190>

Rose, J., Willner, P., Cooper, V., Langdon, P. E., Murphy, G. H., & Stenfert Kroese, B. (2020). The effect on and experience of families with a member who has Intellectual and Developmental Disabilities of the COVID-19 pandemic in the UK: developing an investigation. *International Journal of Developmental Disabilities*, 1–3. <https://doi.org/10.1080/20473869.2020.1764257>

Sart, Z. H., Barış, S., Sarıışık, Y., & Düşkün, Y. (2016). Engelli çocukların Türkiye’de eğitime erişimi: Durum analizi ve öneriler. http://www.egitimreformugirisimi.org/wp-content/uploads/2017/03/ERG_Engeli-Olan-%C3%87ocuklar%C4%B1n-T%C3%BCrkiyede-E%C4%9Fitime-Eri%C5%9Fimi.pdf.

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

Smith, K. R., & Matson, J. L. (2010). Behavior problems: differences among intellectually disabled adults with co-morbid autism spectrum disorders and epilepsy. *Research in Developmental Disabilities*, 31(5), 1062–1069. <https://doi.org/10.1016/j.ridd.2010.04.003>

Smith, J. A., & Osborn, M. (2004). *Interpretative phenomenological analysis*. In G. M. Breakwell (Ed.), *Doing social psychology research* (p. 229–254). British Psychological Society; Blackwell Publishing.

Stankovic M., Jelena, S., Stankovic, M., Shih, A., Stojanovic, A., & Stankovic, S. (2020). The Serbian experience of challenges of parenting children with autism spectrum disorders during the COVID-19 pandemic and the state of emergency with the police lockdown. *The Lancet Child & Adolescent Health*, 1-14. <http://dx.doi.org/10.2139/ssrn.3582788>

Summers, J., Shahrami, A., Cali, S., D’Mello, C., Kako, M., Palikucin-Reljin, A., & Lunskey, Y. (2017). Self-Injury in Autism Spectrum Disorder and Intellectual Disability: Exploring the Role of Reactivity to Pain and Sensory Input. *Brain Sciences*, 7(1), 140. <https://doi.org/10.3390/brainsci7110140>

Şenol, F.B. & Can-Yaşar, M. (2020). COVID-19 pandemisi sürecince öğretmen ve ebeveyn gözünden “Özel Eğitim”. *Milli Eğitim Dergisi*, 49(1), 439-458.

Tekindal, M. & Özlem, Ş. Ö. (2021). Engelli çocuğa sahip kadınların Covid-19 sürecindeki deneyimleri: Nitel bir araştırma. *İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 6 (3) , 115-124.

Toseeb, U., Asbury, K., Code, A., Fox, L., & Deniz, E. (2020). Supporting families with children with special educational needs and disabilities during COVID-19. *PsyArXiv Preprints*. <https://doi.org/10.31234/osf.io/tm69k>

Turkish Medical Association, (2020). *Türk Tabipleri Birliği Covid-19 pandemisi iki aylık değerlendirme raporu*. Ankara: TMA. <https://www.ttb.org.tr/userfiles/files/covid19-rapor.pdf>.

United Nations, (2020). *Policy Brief: A disability inclusive response to COVID-19*. https://www.un.org/development/desa/disabilities/wp-content/uploads/sites/15/2020/05/sg_policy_brief_on_persons_with_disabilities_final.pdf

United Nations, (2020). *Policy Brief: The impact of COVID-19 on children*. https://unsdg.un.org/sites/default/files/2020-04/160420_Covid_Children_Policy_Brief.pdf

United Nations, (2020). *Policy Brief: The impact of Covid-19 on older persons*. <https://unsdg.un.org/sites/default/files/2020-05/Policy-Brief-The-Impact-of-COVID-19-on-Older-Persons.pdf>

Uskun, E., Öztürk, M., Kişioğlu, A., N., Kırbıyık, S., & Demirel, R. (2005). İlköğretim Öğrencilerinde Obezite Gelişimini Etkileyen risk faktörleri [Risk factor of influencing the development of obesity in the primary education students]. *SDÜ Tıp Fakültesi Dergisi*, 12(2), 19-25.

Üresin, E. , İlik, Ş. Ş. , Anıl, A. & Alıcıoğlu, E. (2021). Pandemi döneminde uzaktan eğitimin özel gereksinimli öğrencilerin ebeveynlerinin görüşlerine göre incelenmesi. *Milli Eğitim Özel Eğitim ve Rehberlik Dergisi*, 1(2), 121-147.

van Steensel, F. J., Bögels, S. M., & Perrin, S. (2011). Anxiety disorders in children and adolescents with autistic spectrum disorders: A meta-analysis. *Clinical Child and Family Psychology Review*, 14(3), 302–317. <https://doi.org/10.1007/s10567-011-0097-0>

Vergunst, R., Swartz, L., Hem, K. G., Eide, A. H., Mannan, H., MacLachlan, M., Mji, G., Braathen, S. H., & Schneider, M. (2017). Access to health care for persons with disabilities in rural South Africa. *BMC Health Services Research*, 17(1), 741. <https://doi.org/10.1186/s12913-017-2674-5>

World Health Organization, (2004). *Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003*. https://www.who.int/csr/sars/country/table2004_04_21/en/

World Health Organization, (2005). *Pandemic influenza preparedness and response: a WHO guidance document*. Geneva, Switzerland: WHO.

WHO (World Health Organization). (2011). *Comparative analysis of national pandemic influenza preparedness plans*. Geneva, Switzerland: WHO.

World Health Organization, (2011). *World report on disability*. Malta, WHO.

World Health Organization, (2019). *Middle East respiratory syndrome coronavirus (MERS-CoV)* Cairo, Egypt: WHO.

World Health Organization, (2020). WHO Coronavirus Disease (COVID-19) Dashboard. https://covid19.who.int/?gclid=CjwKCAiA4o79BRBvEiwAjteoYKqyBQvWLeP3F4F77DOOrP1NGm2_obyZOTKUA5ZI48x0eA68ukEiQVxoC_ygQAvD_BwE

Yakut, A. D. (2021). Educators' experiences in special education institutions during the COVID-19 outbreak. *Journal of Research in Special Educational Needs*. 21(4), 345-354.

Yaşlı, G., Turhan, E., Tözün, M., Ah, A., Doğanay, S., & Ülken, Y. (2014). İzmir ili Karşıyaka ilçesi'nde ilköğretim 3. sınıf öğrencilerinde obezite sıklığı ve etkileyen etmenler. *STED/Sürekli Tıp Eğitimi Dergisi*. 23(5), 168-173.

Yarımkaya, E., & Esentürk, O. K., (2020): Promoting physical activity for children with autism spectrum disorders during Coronavirus outbreak: benefits, strategies, and examples, *International Journal of Developmental Disabilities*. 1-6. <https://doi.org/10.1080/20473869.2020.1756115>

- Yıldırım, A., & Şimşek, H. (2011). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara.
- Yucesoy - Ozkan, S., Kaya, F., Gulboy, E., Altun, D. E., & Oncul, N. (2020). General and special education practices during the COVID-19 viral outbreak in Turkey. In I. Sahin & M. Shelley (Eds.), *Educational practices during the COVID-19 viral outbreak: International perspectives* (pp. 19–62). ISTES Organization.