Access Opportunities of Earthquake Victims to Distance Education during the Covid-19 Pandemic

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ABSTRACT

The Covid-19 pandemic has caused extensive changes in education, as in other fields, and the distance education system has been widely implemented as an alternative almost all over the world. However, these new conditions are not equal for everyone; the position of certain social groups has become more disadvantageous in this process. One of these groups is earthquake victims. This study aims to reveal the possibilities and practices of students who lost their homes due to an earthquake and lived in a container city during the pandemic to participate in distance education. The research was carried out in the province of Elazığ, which experienced an earthquake in January 2020 and focuses on the access of students in primary and secondary school to distance education. A qualitative research method was adopted in this research, and interviews were conducted with 11 people who are teachers and parents of students. The findings revealed that students are in a disadvantageous position regarding physical access, ownership, skills, and usage opportunities in accessing the digital equipment and environments required by distance education. Students are mainly unable to access technological tools and the Internet. Students’ age, economic and cultural capital, inadequacies caused by physical access restrictions, and psychological, social, economic, and spatial problems triggered by earthquakes and pandemics have greatly restricted their ability and opportunities to access distance education. The study is essential in revealing that students’ multiple disadvantaged positions negatively affect their distance education participation.

Keywords: Digital inequalities, Distance education, Covid-19 Pandemic, Earthquake victims, Elazığ

Disasters are social phenomena, regardless of their source, spread, and time of occurrence. Naming an event a disaster is associated with the social impact dimension (Guggenheim, 2014). Disasters can cause disruptions in the routine functioning of social life, deepen existing inequalities, and even produce new inequalities. However, disasters do not affect all social groups with the same severity, and vulnerable and fragile people and groups are more negatively affected by disasters. The concept of vulnerability is defined as the potential of a person or group to be negatively affected by danger and to resist and cope with dangers (Cutter, 1996). In a sense, the concept refers to the disadvantaged position of individuals or groups against disasters.

Covid-19 was declared a pandemic by the WHO in March 2020 and has significantly affected almost all social groups worldwide. However, due to the wealth level, gender, age, health status, and working conditions, some individuals, communities, and even countries have experienced the consequences of the pandemic more deeply. Almost all over the world, due to the pandemic, significant transformations have been experienced in the routine of daily life, and social life has entered a rapid and essential digitalization process. One of the most critical areas that undergo this process is the education system. All over the world, face-to-face learning activities have started to be carried out on computers and the Internet, and courses and exams have begun to be implemented online.

Many studies during the pandemic have revealed many positive and negative aspects of emergency distance education. Distance education offers opportunities such as reducing training costs, learning new technologies, flexible use of time, and the chance to watch the lessons again. However, this process also leads to significant problems and limitations, such as the inability to study with peer groups and poor opportunities to receive feedback from lecturers, (Yazgan, 2022). Therefore this new situation has led to the reproduction and deepening of the inequalities in the education system. It is known that some groups are in a more disadvantaged position in the education system due to their economic and cultural capital (Selwyn, 2004). Moreover, the digitalization of the process and the capital required to access and adapt to this new process have reduced some social groups from their disadvantaged position to an even more disadvantaged position.

In today’s world, many disasters are happening simultaneously. Earthquakes, floods and fires, locust plagues, explosions, and terrorist incidents in various parts of the world during the pandemic are indicators of this situation. While this situation creates...
different vulnerabilities spatially and socio-demographically, it can also lead to new problems arising from different types of vulnerabilities. Groups described as fragile or vulnerable due to their disadvantaged position, as reported in the literature, become more vulnerable after disasters. Each type of disaster creates different vulnerabilities or reinforces other inequalities.

This study focuses on the multiple vulnerabilities faced by individuals who have experienced earthquakes during the pandemic and reside in container cities, which are residential areas with houses built to meet temporary shelter needs because the individuals do not have economic capital. The main question of this research is what are the problems faced by students living in container cities to access distance education? Therefore, the research aims to understand the opportunities and practices of earthquake survivors to participate in distance education.

The adverse effects of the covid 19 pandemic on many social groups and the problems related to distance education in this process have been revealed by various studies. This research differs from the others in that it focuses on the impact of students’ multiple disadvantaged positions on their participation in distance education. In addition, in this study, the problems related to distance education are discussed from the perspective of parents and teachers, not students. To understand the issue of access to distance education in temporary residences after the earthquake, with its economic, social, and spatial dimensions, the opinions of parents and teachers were taken as the basis. For this reason, it is thought to fill a lack in the literature.

This article consists of eight chapters. In the introduction, a general framework regarding disasters in general and the Covid 19 pandemic, in particular, is given. Chapter 2 of the article includes the theoretical background and literature on digital access and inequalities. This section is followed by the third section, which summarizes the distance education activities in Turkey. In the study site section, the fourth part of the article, meaningful information about the field where the research was carried out is conveyed. These sections are followed by the method, findings, discussion and conclusion sections. Finally, implications and possible future research are given in the eighth and last part of the article.

Theory and Background

Emergency remote education practices caused by the pandemic have caused the inequalities in societies to be reflected on this platform and even to deepen and become more visible through distance education. In the early studies, inequalities in the digital environment were discussed over the digital divide and digital gap concepts. The concept of digital divide/gap is defined as “A disparity between those who have easy access to computers and the Internet and those who do not.” (Chandler & Munday, 2011, p. 102). However, with information and communication technologies being relatively accessible, meaningful discussions have come to the fore that the digital divide concept, which only focuses on differences in ownership and access, is insufficient and does not cover inequalities regarding using these technologies (DiMaggio & Hargittai, 2001). These discussions have resulted in the conceptualization of the digital divide concept according to the type of inequality. While inequalities that refer to the problem of ownership of communication tools and internet access have been called the first-level digital divide (Attewell, 2001), differences in the ability to use these tools have been called the second-level digital divide (Hargittai, 2002). While the problem of access and who has access to these technologies are at the forefront of the first-level digital divide-oriented research, the second-level digital divide studies focus on the usage practices and how these technologies are used (Özsoy, 2020). What is essential in the second-level digital divide is the skill differences regarding the effective and efficient use of the web (Hargittai, 2002). Differences regarding the tangible benefits provided by communication technologies are discussed within the concept of the third-level digital divide (van Deursen & Helmers, 2015). This third type of division focuses on acquiring economic, social, and cultural capital through communication technologies and is considered together with the concept of digital capital (Ragnedda & Ruiu, 2017).

The digital divide concept is a concept that early research uses to refer to the access gap. However, inequalities in the digital environment are a much more complex, dynamic, and multidimensional phenomenon (van Dijk & Hacker, 2003). For this reason, this study used the concept of digital inequalities, which is preferred by researchers who discuss the inadequacy of the notion of the digital divide (DiMaggio et al., 2004; Halford & Savage, 2010).

According to Van Dijk (2005), four fundamental access problems cause digital inequalities: motivational access, material access, skill access, and usage access. Motivational access refers to the motivation to use digital technologies. Lack of interest in computer and internet technologies or fear of using them leads to access problems due to lack of motivation. Material or physical access refers to accessing computers and the Internet, which is considered the first level digital divide. Skill access refers to the ability to use these tools in the case of physical access, and according to Dijk (2005), skill access leads to a broader digital divide than other forms of access. Dijk examines skill access (2005) at three basic levels: operational, informational, and strategic. Operational skills are skills to operate computers and internet connections; informational skills are skills that enable searching and processing information on computers and the Internet; strategic skills encompass the individual’s ability to use these technologies to improve their social position and create opportunities.

Moreover, usage access focuses on the opportunities to use computer and internet technologies and the differences in the sociodemographic distribution of these opportunities and usage practices (Dijk, 2005). Usage opportunities refer to the necessity
of sharing the said tools with others in the home, school, or work environment, which shortens usage times (Dijk, 2005). These inequalities are affected by individuals and their families’ economic and cultural capital, and as Bourdieu (1990) states, these inequalities are legitimized and reproduced through educational institutions.

**Distance Education Activities Conducted during the Covid-19 Pandemic in Turkey**

The widespread use of computer and internet technologies globally and the fact that second and third-level digital inequalities have become more prominent in recent years do not mean that inequalities arising from access have entirely disappeared. Although the digital divide is seen as an easily closed and overcome problem (Selwyn, 2004), International Telecommunication Union statistics show that only 51% of the world’s population used the Internet in 2019. The same statistics show households with internet access at home at 88 percent, individuals using the Internet at 74 percent, and households with a computer at home at 55 percent in Turkey (ITU, 2020).

Due to the pandemic, face-to-face education was discontinued in primary, secondary, and higher education institutions in 191 countries as of 2020. The education of approximately 1.6 billion students was interrupted, which corresponds to approximately 90% of the total student population in the World (UNESCO, 2020). As of March 16, 2020, primary, secondary, and higher education institutions were suspended in Turkey, and distance education was started at all levels. As of March 23, the Turkish Ministry of Education started broadcasting courses for primary and secondary schools on some TV channels. In the following process, students started to take online courses through the distance education platform called Educational Information Network (EBA) (Republic of Turkey Ministry of National Education, 2020). The education of 25 million students, including 16.5 million at the primary and secondary levels, was interrupted by the pandemic in Turkey (UNESCO, 2020).

**Study Site**

On January 24, 2020, a 6.8 magnitude earthquake occurred at the center of Elazig. Many buildings were damaged in this earthquake, in which 41 people died, and nearly 2000 were injured. Citizens who lost their homes due to the earthquake, could not afford the rising rents, and could not find a solid house to settle in, were settled in the container cities established about a month after the earthquake. More than 2000 families in the city, approximately 7000 people in total, lived in these containers set up in various parts of the city for two years. Some of the residents in this area are families who had lost income or jobs during the pandemic and were tenants who currently live on social aid.

Container cities and container houses where earthquake survivors live have some structural problems. In the container city chosen as the sample, there were 456 container houses with two floors with an area of 21 square meters. Considering the population circulation, an average of 420 families and 1600-1800 people lived in this container city. Three hundred of this population were students, of which 200 were at the primary education level, 80 at the secondary education level, and 12 at the higher education level. This container city, built before Covid-19 was declared a pandemic, did not have suitable spatial and structural features for distance education. There was no internet infrastructure or broadband internet service in the container city. A prefab of 60 square meters, established as a library, was converted into an EBA (Educational Information Network) center after the Covid-19 pandemic began. A second center was opened for distance education activities at the parents’ request of the local authorities. In each of these centers, there were 13 computers with internet access. One of these centers was open between 8 am and 6 pm, and the other one was open between 8 am and 9 pm, and a total of five teachers work in shifts in the two centers. The first EBA center in the container city became active six months after distance education started in Turkey and the second three months after the first.

**Method**

**Research Design**

A qualitative research method was adopted in this study, and the research was designed as a case study. Case study research holistically embraces one or more cases within the constraints of time and place (Creswell, 2013). Case studies use techniques such as interviews, observation, and document analysis (Denzin & Lincoln, 2005). This research focuses on the distance education participation processes and practices of students who had to live in a container city after a severe earthquake. For this purpose, interviews were held with students’ parents, teachers, and the container city manager, and information on the number of students living in the container city and the socio-economic status of these students and their families were obtained.
Participants

Qualitative studies are those in which non-probability sampling methods are adopted. Maximum variation sampling, criterion, and convenience sampling (Onwuegbuzie & Collins, 2007) methods were used in this study. There are three container cities in the province of Elazig, where the research was carried out. Within the scope of this research, Kirklar Neighbourhood container city, which is in the most central and most heterogeneous position, was preferred to provide maximum variety. In this container city, having a child receiving distance education at the primary or high school level was considered a criterion. Semi-structured interviews were conducted with those who were suitable and willing to participate in the research according to convenience.

Within the scope of this research, interviews were conducted with 11 people, including eight students’ parents from different families, two teachers working in the container city, and a container city manager. In qualitative studies, the size of the sample is determined by the frequency of the data, and the data collection phase is terminated at the point where the data starts to repeat and reaches saturation (Onwuegbuzie & Collins, 2007). In addition, Creswell (2011) states that the number of participants for a case study should be at least 3-5. Qualitative research aims not to make statistical generalizations but to obtain insights into individuals, events, or phenomena and to reach analytical generalizations (Curtis, Gesler, Smith, & Washburn, 2000). The demographic data of the participants are included in Table 1.

Collection and Analysis of Data

Teachers and parents were contacted through the container city manager. Different interview forms were prepared for parents, teachers, and the manager. In addition to sociodemographic questions, parents were asked questions about their children's participation in distance education and the problems they experienced in this process. Questions were asked to the teachers about the structural and technical features of the EBA centers serving within the container city and the characteristics and problems of the students using these centers. The city manager was asked questions about the families’ socioeconomic status in the container city and the problems of students and families. The interviews were held in April 2021 and lasted an average of 40 minutes. Audio recordings were taken during the interviews with the permission of the participants. The study has informed consent and ethical approval. Approval was granted by the Ethics Committee of Adıyaman University (06.03.2021/113).

By using the content analysis method, the data was coded under the concepts that clustered similar issues, and categories and themes were acquired (Attride-Sterling, 2001). As a result of the data analysis, 71 codes were obtained, and six categories were identified from these codes. Finally, the categories were grouped and gathered under three themes.

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Gender and age</th>
<th>Marital status and number of school-age children</th>
<th>Educational and Income status</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Female, 39</td>
<td>Married, 3 students</td>
<td>Elementary School- minimum wage</td>
</tr>
<tr>
<td>R2</td>
<td>Female, 43</td>
<td>Married, 2 students</td>
<td>Elementary School- minimum wage</td>
</tr>
<tr>
<td>R3</td>
<td>Female, 48</td>
<td>Divorced, 2 students</td>
<td>University- superannuation</td>
</tr>
<tr>
<td>R4</td>
<td>Male, 44</td>
<td>Married, 3 students</td>
<td>High School, minimum wage</td>
</tr>
<tr>
<td>R5</td>
<td>Female, 42</td>
<td>Divorced, 3 students</td>
<td>Elementary School, public assistance</td>
</tr>
<tr>
<td>R6</td>
<td>Male, 41</td>
<td>Married, 2 students</td>
<td>Elementary School, minimum wage</td>
</tr>
<tr>
<td>R7</td>
<td>Female, 40</td>
<td>Divorced, 2 students</td>
<td>High School, public assistance</td>
</tr>
<tr>
<td>R8</td>
<td>Female, 41</td>
<td>Married, 2 students</td>
<td>Elementary School, public assistance</td>
</tr>
<tr>
<td>R9</td>
<td>Teacher (Male), 44</td>
<td>Married, 3 students</td>
<td>Elementary School- minimum wage</td>
</tr>
<tr>
<td>R10</td>
<td>Teacher (Male), 35</td>
<td>Married, 2 students</td>
<td>Elementary School- minimum wage</td>
</tr>
<tr>
<td>R11</td>
<td>Container city manager (Male), 53</td>
<td>Married, 2 students</td>
<td>Elementary School- minimum wage</td>
</tr>
</tbody>
</table>

Table 1.

Sociodemographic Distribution of the Participant
Validity and Reliability

In qualitative research, there are some main issues that should be considered to ensure the validity and reliability of a study. It is essential to confirm the information obtained in the research with different data sources and methods (Yıldırım & Şimşek, 2013). In this research, the information collected from the parents was confirmed by the teachers and the city manager, and some official documents were also used in addition to the interviews. Support was received from a second expert to ensure the consistency of their coding and checking of the categories. The obtained data are presented analytically in a way that can be transferred to similar studies (Erlandson et al., 1993, as cited in Yildirim & Simsek, 2013).

Limitation

This study is not intended to focus directly and exclusively on digital inequalities. The study aims to reveal the effects of spatial problems, current and former economic capital, cultural capital, and the pandemic process on students’ participation practices in distance education and the difficulties they experience. The number of participants and the interview restriction created by the pandemic conditions are the main limitations of this study.

Findings

In the study, three themes related to the participation of disaster survivors living in container cities in distance learning were identified. These themes are access to information and communication technologies, skills to use these technologies, and opportunities to use them.

Access to Information and Communication Technologies

The theme of accessing information and communication technologies consists of two basic categories: accessing computer technologies and accessing internet services. Computer and internet access represent the most common problem in this study. Students living in container cities mostly did not have computers and the Internet, and they also experienced difficulties accessing these tools. The categories under this theme, the problem of accessing the computer and the Internet, will be evaluated together as they are frequently mentioned together. The following statement shows the main points that parents of students draw attention to regarding access to distance education.

There is no internet infrastructure here anyway and my child’s tablet was also broken during the earthquake. He can only access EBA when his father and I have the Internet on our phones. Since our phones are not very good in features, applications cannot be downloaded correctly. (R5, female)

This statement shows that these students living in the container city and affected by the earthquake did not have tablets, computers, and phones. They also did not have an internet infrastructure and Wi-Fi they could access. Students could access the Internet and technology through their parents’ phones. However, parents’ phone models were not suitable for downloading the compulsory EBA application for students to be included in the distance education system, and internet packages were also limited. This situation is an essential indicator of the problem of access to ICTs.

I called the municipality several times to ask them to distribute free tablets because the children were falling behind in classes, but they were not given to them. (R1, female)

We asked for internet infrastructure, we conveyed it to our manager, but our requests have not been fulfilled for one year. (R6, male)

Container city residents stated that they requested internet infrastructure and tablets from the authorities for distance education activities, but these demands were not met in real terms. From the interviews with parents, teachers, and the container city manager, it was understood that a limited number of tablets were distributed for free, and the Internet was only provided at two prefabricated buildings that later started to serve as EBA centers. Some parents had sent their children to relatives to access the Internet to remove the physical barriers to their child’s access to distance education when they did not have access to the Internet.

When there was no internet, I took my daughter to her aunts to not fall behind in her classes, but my son could not attend the classes. (R3, female)

Usage Skills

The second theme is the usage skills theme, which emphasizes students’ operational and informational skill deficiencies. Students’ parents and teachers frequently mention difficulties experienced in using computer and internet technologies. At this
point, the age of the student is a significant determinant. Deficiencies in operational and informational skills are common among younger students, those who have just started school and have no or little schooling due to the pandemic, and those who do not have access to these technologies at home.

My son does not go to the EBA center because he is small. He is currently in second grade but has not learned anything. My daughter also goes to the EBA center from time to time. She is also shy; she cannot ask anyone for help. However, it is a handy place for high school students. (R1, female)

Students’ capacity to use the Internet is low. Because they are young, some of them encounter a computer for the first time, and some have never used a computer before. Due to such problems, they cannot use the Internet easily and cannot easily connect to the course. At that point, we are asking them for their ID number and EBA support password that they brought with them and log in on their behalf. (R10, teacher)

The data has shown that students new to primary school generally do not know how to turn a computer on and off and use a mouse. Some students who do not have computers or tablets at home do not go to the EBA support point because they do not know how to use the technology and are wary of asking for help. Lack of ability to use computer and internet technologies prevents both physical access and opportunities to use them. Even if students have physical access, they have difficulties participating in online learning activities without assistance. Most parents think that the EBA center is suitable for students with computer skills at the secondary and high school levels.

Although age is a prominent determinant in usage skills, it is seen that cultural and economic capital is significant. The statements of the teachers show that some secondary school students do not know how to use a computer and the Internet, as well as the younger students. This situation can also be evaluated as an indication that being economically disadvantaged negatively affects cultural or digital capital acquisition.

It is usually a problem in younger age groups, but there are some secondary school students. When I see that they cannot start the computer, I am shocked and ask if they have not had computer courses. They answer that they have not taken a computer course and do not know how to use it. (R10, teacher)

Teachers stated that a significant part of the students had a general ignorance and indifference not only in digital skills but also in focusing on a course and in having the necessary materials for the lesson. The student’s indifference to distance education indicates a motivational problem that prevents the student from participating in this activity. At the same time, a lack of skills in using computers and internet technologies causes motivational access problems. Their conditions substantially limit the motivation of students toward accessing distance education. These conditions can be listed as a tragic earthquake experience and material and moral losses, acute spatial residence conditions, low economic and cultural capital, the coronavirus pandemic, and the weakening of social ties due to the pandemic.

### Usage Opportunities

The third and final theme of the research is the usage opportunities. This theme corresponds to the term usage access in the digital inequalities literature. Usage access refers to the opportunities to use computer and internet technologies. However, factors such as the environment and sharing these tools with others affect these opportunities and create access restrictions by affecting the usage time of the tools. Under the theme of usage opportunities, there are categories of sharing digital tools and spatial constraints.

As mentioned before, access to computer and internet technologies, called physical access, was the main obstacle for students living in the container city to benefit from distance education. Since students did not have their phones, tablets, and computers, they used their parents’ phones and the Internet to access distance education. In the sample consisting of families with at least two students, sharing their parents’ phones and the Internet with their siblings and using these tools when the parents were available is a usage access problem in itself.

There is no tablet, no internet; children attend distance education on my phone. Sometimes their classes overlap. My son and daughter try to enter and access their lessons one after the other. If one attends the course, the other cannot participate. (R4, male)

As can be seen from the statements, parents gave their phones to their children during class hours. However, access to this device remained only temporary physical access, even when the model or features of the phone are ignored. Considering that at least two students are in each family, children can attend classes only if both parents are home. In cases where parents were not at home at the same time or if only one parent had a phone, students had to relinquish their classes in turns and only attend classes on certain days and hours. Even this limited participation in classes could only be realized to the extent that Internet packages allowed, and usage access could also interrupt physical access in a sense.

Spatial constraints were another category that affected usage access and hindered usage opportunities. The suitability of the place to be used in distance education was one of the essential issues emphasized in this research. In this study, two main places affected the student’s access to distance education in terms of usage opportunities: The container house where the student lives and the EBA center serving in the same container city campus.
Container houses with a total area of 21 square meters, consisting of only two rooms, and where students lived with their families, created significant limitations even if they had digital tools to access distance education. In these containers, where families of 4-6 people live on average, students did not have an individual room where they could carry out their educational activities, and they did not have tables and chairs where they could work.

When my daughter attends the class, my son and I spend time in the kitchen. I made a cardboard table for my daughter; she sits on the sofa bed and attends classes that way. (R3, female)

Our conditions are complex; for example, if both have classes simultaneously, one attends their classes at the door entrance and the other in the room, yet their voices are mixed. (R8, female)

The above statements show that the position of the families in the container houses and their daily practices had to change during the children’s course hours. Another limitation created by the container house regarding participation in distance education was that the sound and vibration coming from other floors, adjacent blocks, and the street could be heard and felt. This noisy environment either kept students from working completely or pushed them to work in parks or EBA centers.

My child borrowed a computer from his uncle and worked in parks almost every day because there was too much noise. (R2, female)

There is much noise from outside, and the children cannot focus on their lessons. When the next-door neighbor coughs, the sound is heard. I have a baby too. When I turn on the TV so that the baby does not cry, my other child cannot focus on his lesson. The children are all in the same room, so the classes are not efficient. (R1, female)

EBA centers are another important place for students to access distance education within the framework of usage opportunities. These centers were two prefabricated buildings (60 square meters each) serving as a library in the container city established after the earthquake and converted into EBA points after the pandemic. These two centers could only admit students below their capacity due to pandemic conditions and physical distance rules. There were only 13 computers in each EBA center. Considering that each student’s full-time courses corresponded to half a day, almost only 13 students could participate in distance education in half a day. Therefore, the fact that there were only two EBA centers in the container city, the computer capacities and service hours of these centers were limited, while the number of students was high, led to competition in the use of limited opportunities.

The children went to the EBA support center several times, and they could not find a place. So, they never went again. (R8, female)

We do not allow students to do homework when many people attend the online live courses and there is no empty computer. Since live courses are held in real-time, students may fall behind in classes. If the center is uncrowded, we offer the opportunity for students to do their homework and complete the missing course topics on YouTube. (R10, teacher)

Problems such as crowded queues in front of the EBA center and low capacity led some of the students to completely give up on coming to these areas, considering the pandemic conditions. Other issues that prevented the use of EBA centers were; it was determined that parents did not want to send their children to crowded environments for fear of the virus, some students had chronic diseases, some students lived relatively asocially, and some families did not want their children to socialize with other children in the container city.

I usually do not let my kids go outside. While waiting in line in front of the EBA center, they may argue or play with someone. Honestly, I do not want my children to be in that environment. There are all kinds of people there. That is why I try to keep my kids away from there. (R8, female)

Since the children are a bit small, we cannot leave them alone. Children also do not want to go there because they cannot find a place. When they go, they wait at the door for hours. (R5, female)

As can be understood from the participants’ statements, crowded environments due to low capacity and the fear of children catching viruses and socializing with the wrong people prevented students from using communication technologies in a spatial sense. In addition, some families relied on the pandemic measures in the EBA center and sent their children to these centers from time to time. As a matter of fact, the teachers working in the center had duties such as keeping the environment sterile, ensuring that the mask and distance rules were followed, and providing support to students who did not have access skills.

I always clean the computer, desk, and keyboard after each leaving student. We already have disinfectants at the entrance of the classroom. Kids use it when they come. (R9, teacher)

To overcome the usage access problem, some parents applied to the relevant institutions, extended the service period of these centers, and ensured the way for more students to use these opportunities.

I asked someone to mediate. EBA centers were closing at five-thirty p.m.; I tried to make it open until 9 o’clock, and I succeeded. We had two libraries where there was no Internet. Our deputies came to visit; I asked them for internet for our libraries. (R3, female)
In addition to these problems that prevented the use of EBA centers, some factors motivated the use of these centers. In addition to accessing computers and the Internet and participating in distance education activities, students evaluated these centers as a socialization area and went to these centers for this purpose. Especially, teacher statements show that students who felt bored and stuck in their crowded houses of 21 square meters socialized in these centers.

The student profile going to the EBA center showed significant differences in terms of age and gender. Teacher statements revealed that primary and secondary school students compared to high school students and female students compared to male students used these centers more intensively and consistently.

Mainly primary and secondary school students and mostly female students come. (R9, teacher)

Usually, female students come here. Some come to attend classes, and some come because they are bored at home. Since the container houses are tiny, there is no room, especially in crowded families. Therefore, children come here to spend time. Boys usually spend time playing ball on the carpet field, which reduces their coming to the EBA support point. Since the areas where girls can socialize outside are inadequate, they inevitably come to EBA points. (R10, teacher)

Teachers associated the fact that girls used these places more intensively and consistently than boys because girls only had a few opportunities to socialize outside of EBA centers. Another result of the research is that, in addition to socialization and access to distance education, EBA centers created information-sharing and cooperation opportunities among students with a certain consciousness and provided a kind of peer learning atmosphere.

Sometimes they help each other. For example, when a student does not understand a subject in mathematics, they can ask other students for support. The EBA center offers such children the opportunity to get to know each other better. (R10, teacher)

This data shows that these centers, which serve as an access point to distance education in the container city campus, offer essential opportunities despite some limitations. EBA centers provide physical access for students who do not have digital equipment and the Internet at home (although the number of tools limits these opportunities), teacher support for students who cannot use the Internet and computer technologies (although being young and being shy reduces going to these centers), and a convenient environment for students who cannot find comfortable working environments (although their capacity and working hours are limited).

**Discussion and Conclusion**

Container cities are sociologically critical phenomena as they are compulsory and temporary settlements. The declaration of the spread of coronavirus as a pandemic and the interruption of formal education has led to new problems for families living in container cities. Much research has revealed that different social groups, classes, and regions are disadvantaged in accessing distance education during the pandemic. In this study, the opportunities and practices of participation in the distance education process of individuals who became fragile with an earthquake and had to live in tiny container houses under challenging conditions, who were economically fragile before the earthquake, and whose social ties were weakened by the pandemic, were investigated.

In this research, three themes were determined regarding the distance education participation practices of the disaster survivors living in the container city. These themes are access to information and communication technologies, skills to use these technologies, and opportunities to use them. The theme of accessing information and communication technologies corresponds to the conceptualization of physical access (Dijk, 2005) in the literature. The data reveals that almost all participants did not have digital devices, such as computers, tablets, and phones, and they did not have Wi-Fi at home. These students used their parents’ phones or a computer and the Internet at the EBA center to access distance education. However, an insufficient number of digital tools at the EBA center, the poor quality of their parents’ phones, and limited internet packages indicate that there was a physical access problem as well as an ownership problem. This data shows the existence of the first-level digital divide (Attewell, 2001), which is stated to be relatively solved in the literature and is seen as easy to solve (Selwyn, 2004). Although parents’ struggles to solve the access problem led to a small number of students accessing tablets and increasing the service time of EBA centers, many students could not overcome the physical access problem. Although the sample includes a limited number of parents, the statements of the container city manager, teachers, and parents show that the disadvantageous conditions in accessing distance education can be generalized to almost all students in the container city.

This research supports other studies (Arun & Elmas, 2020; Sezgin & Firat, 2020), revealing that there are significant differences in physical access to distance education in Turkey in terms of class and region. The last theme in this research was usage opportunities, with families living in Turkey’s relatively underdeveloped Eastern Anatolian region and who had to live in a container city after the earthquake because they were economically vulnerable, which shows that physical access still poses a significant problem in accessing distance education.

Another prominent theme in the research is the ability to use information and communication technologies. This situation,
expressed as skill access in the digital inequalities literature, is examined at three basic skill levels: operational, informational, and strategic skills (Dijk, 2002). In this study, data on strategic skills within the scope of skill access could not be determined. Data on operational and informational skills, including the ability of students to operate computers and internet connections, and to access the applications and information necessary for them, were obtained. It is thought that the fact that the participants are still dealing with fundamental problems such as ownership, physical access, and operational and informational skills is effective in the absence of data on strategic skills that express an individual’s development of social position by using internet technologies. Students’ age, economic and cultural capital, inadequacies caused by physical access restrictions, and lack of motivation are evident in skill problems seen at the operational and informational levels.

In the literature, digital inequalities, especially skills access, are often associated with aging (Sütlüoğlu, 2020). However, children and young people are also not homogeneous in ownership nor in their ability to access and use technology (Arun & Elmas, 2020). In this study, it was observed that children at the elementary school beginner level were inadequate in terms of skill access. It was determined that the factors affecting this situation are not being able to use digital tools at school due to the pandemic, not acquiring the knowledge and skills to use these tools, and not having the opportunity to access these tools at home. However, the data reveals that a skill problem is not only in primary school level students but also in higher grades. It was determined that some of these students do not have basic computer skills, most of them do not have the necessary informational skills to enter the distance education system, and students who go to EBA support centers can access this system with the help of teachers. In fact, it was stated by the teachers that some students did not have enough interest and awareness not only in using digital technologies but also in listening, focusing, and taking notes. It would not be correct to talk about only age-related access problems. Considering that these students are the children of families with low economic and cultural capital, it is also seen that skill access has class and cultural dimensions. Digital inequalities are not independent of physical inequalities. The research population consisted of individuals living in a container city established by the municipality because they experienced a devastating earthquake, their houses were damaged, and they could not afford to pay rent. Some of these people were also parents who lived on social benefits before the earthquake, worked minimum wage or temporary jobs, and received secondary and high school education. Numerous studies have shown that parents’ education levels (Idris et al., 2020) and socioeconomic status (Suna et al., 2020) affect children’s success. Some studies investigating the effect of cultural capital and habitus on the academic success of primary school children have revealed that ethnic origin, economic status, and parental educational status affect student success. According to these studies (Lee & Bowen, 2006), student success increases in parallel with the parent’s education level. In addition, the psychological distress caused by being an earthquake victim, the problems caused by living in tiny and crowded container houses, the change in daily life practices, the economic difficulties encountered with the pandemic, and social isolation affected the motivation of both students and their families regarding distance education.

Access to the Internet and computer technologies does not mean that these technologies can be used properly, and regular use of these technologies requires specific skills (Bonfadelli, 2002). Similarly, the existence of physical and skill access does not mean that there is usage that corresponds to the term usage access in the literature. Under this theme, the opportunities and environments for students to access distance education were discussed. The necessity of sharing digital tools with parents and spatial constraints were the main categories of usage opportunities. The research results showed that students did not have digital tools and the Internet, and they entered the distance education system by using their parents’ phones or by going to the EBA center. Additionally, students could only attend lessons using their parents’ phones and internet packages during the hours when the parents were at home, and students also shared these opportunities with their other siblings. Sharing this equipment with others within certain restrictions (time, Internet packages) allows students to attend only some courses, so there is no real access.

Freedom of use of the space, defined as the autonomy of use by DiMaggio and Hargittai (2001), is another dimension of access to use. The container house where the students lived, and the EBA support center serving in the same container campus were the primary spaces that provided/restricted access to use. Since container houses are small, crowded, and noisy, even if students have physical and skill access, they are not suitable for efficient use of these facilities. The spatial constraints created by the house where the students lived also caused motivational access problems. At this point, motivational access can not only be a cause but also an effect. Students who cannot follow their lessons regularly and efficiently and cannot do their homework become alienated from the distance education process over time and abstain from attending educational activities, thinking they are already dysfunctional. This condition is reflected in the student’s success, restricts the capital that the student will gain through education, and can put the student behind the students who can participate in the distance learning process in more comfortable spaces.

Moreover, the EBA center creates limitations in terms of capacity, equipment, and service time, and students can wait in crowded queues for long hours to access the opportunities there. In addition to sharing limited opportunities with a large group of peers, the fear created by the pandemic conditions and, as parents put it, the fear of socializing with others in a gathering place with “all kinds” of people were other reasons that prevented the use of the EBA center.

As some factors increase the opportunity to benefit from EBA centers, going to these centers also created opportunities. These centers, used mainly by primary and secondary school students and female students, allowed them to socialize during the
pandemic when schools closed. This socialization opportunity paved the way for the emergence of peer relationships and learning practices amongst each other, which distance education has dramatically disrupted (Varışlı, 2021). The research results showed that the socialization opportunity offered by EBA centers enables information sharing and peer learning among conscious students. Therefore, regarding usage autonomy, the containers in which students lived had a restrictive role in accessing distance education, while EBA support centers contained limitations and opportunities.

The results show that earthquake-affected students, a disadvantaged group who had to reside in temporary residences, were also deprived of educational activities due to the extraordinary conditions and the economic capital that condemned them to these conditions. In addition to the economic capital, the lack of cultural capital restricted the student’s actual access to distance education, even in the presence of physical access. Inequalities in the physical world are naturally reflected in the digital world (Selwyn, 2004). In this sense, it can be stated that economic and cultural capital deficiencies also prevent the acquisition of digital capital, and the inequalities that already exist in the education system are further reinforced by distance education.

Implications and Future Research

Digital inequalities become more evident in disadvantaged and vulnerable social groups and affect the separation of these groups from educational processes. The UNICEF (2020) report and some studies (Yıldız & Vural, 2020) revealed that disadvantaged students who have health problems, receive foreign language education, are immigrants, refugees, or workers have a high risk of permanently dropping out of school in the future due to prolongation of the pandemic. Students affected by the disaster are also among the students who are vulnerable and disadvantaged in terms of material and emotional losses, and the double victimization experienced due to the pandemic causes these groups to be more indifferent to distance education and not to attend classes. However, education and digital equality are fundamental rights that must be provided for all citizens (Binark, 2015). For this reason, opportunities and infrastructure services that will enable all citizens to benefit from these rights should be included in the scope of social policies. More inclusive policies should be adopted, considering the usage skills and usage opportunities, as well as physical access problems. In particular, projects should be prepared in cooperation with local institutions to ensure that students from all walks of life have the skills to use computer and internet technologies.

This study is not intended to focus directly and exclusively on digital inequalities. It aims to provide an overview of the opportunities and practices of distance education participation of earthquake survivors residing in the container city through students’ parents and teachers. For this reason, how much efficiency this sample could get from distance education is not included in the scope of this study. The data obtained in the study generally refers to digital inequalities corresponding to the concept of the first and second-level digital division. Future research can compare the short-term academic success of students who are more disadvantaged during the pandemic with other students.

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