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Mustafa Tevfik Hebebci[1], Yasemin Bertiz[2], Selahattin Alan[3]
[1]Ph.D.-Necmettin Erbakan University
[2]Kırklareli University
[3]Selçuk University

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Investigation of Views of Students and Teachers on Distance Education Practices during the Coronavirus (COVID-19) Pandemic

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Abstract

The aim of this study is to reveal the opinions of teachers and students about the distance education applications carried out in the COVID-19 pandemic, which was identified in Wuhan, China in December 2019 and has spread around the globe in no time. The population of the research consists of 16 teachers and 20 students. The data were analyzed by content analysis technique and divided into themes, sub-themes and codes. It was concluded that students and teachers have positive and negative opinions about distance education activities. The fact that education can be carried out in a planned and scheduled manner even under extraordinary conditions is frequently expressed in positive opinions. Issues such as restricted interaction, infrastructure problems and lack of equipment are among the remarkable negative opinions regarding distance education activities. In addition, opinions have been put forward that distance education will be used more effectively in the future along with necessary improvement and in-service training.

Introduction

The new type of coronavirus, also known as COVID-19, is a contagious infection that first appeared in Wuhan, China, in December 2019 (Ministry of Health, 2020). COVID-19, which quickly spread across the world by crossing Chinese borders, was declared as a pandemic by the World Health Organization (WHO) (WHO, 2020). It is transmitted by inhalation or hand contact of droplets scattered in the environment by the sneezing of sick individuals thereby infecting the mouth, nose, or eye (mucous membrane) (Liu et al., 2020). The pandemic, which has symptoms such as cough, fever, and severe acute respiratory infection, has had fatal consequences and has threatened the world (Ministry of Health, 2020).

National governments have had to take radical measures such as social distancing (social isolation), quarantine practices, martial law, travel, and education restrictions to control the spread of the outbreak (Bourouiba, 2020). The masses have to stay home for a while in order to slow the spread of the outbreak. This caused many countries to suspend their educational activities at school. The closure of schools and universities during the pandemic affected many students (Zhong, 2020). Lack of physical and material conditions made it necessary to switch to distance education in this period (Alcoforado, 2020; Urdan & Weggen, 2000). Thus, many countries such as China, Italy, USA, England and Georgia have switched to distance education by suspending face-to-face education to minimize the impact of the pandemic on education.

The COVID-19 pandemic has affected many areas in the world that directly concern human life, particularly health, tourism and the economy. According to Telli, Yamamoto and Altun (2020), education is the sector most affected by COVID-19 after the health sector. It is evident that the pandemic has affected the education life of a large learning population in a very short time. As a matter of fact, the number of students whose educational activities were restricted was around 300 million in March 2020 and the number reached 1.6 billion in April 2020. Figure 1 shows that COVID-19 had a great effect on education and training activities in a short time. Due to the rapid spread, many countries around the world have had to interrupt educational activities or develop different alternatives in a very short time. UNESCO (2020) data shows that as of April, 92% of the students in the world have been affected by their education and training life. While the number of countries that closed schools in March was six, this number increased to 195 a month later.

Distance education is a computer-based teaching method in which the interaction between students and education practitioners is provided from a certain center in cases where classroom education cannot be performed due to limitations in general education and training process (Eygü & Karaman, 2013; Moore, Deane & Galyen, 2011). Distance education is considered as a promising innovation with its flexible learning environments (Allen et al., 2010). Distance education with a long history was first implemented by mail and

then continued by letter. Thanks to the developments in radio and television technology, distance education courses started to be broadcast on radio and television. With the development of satellite, fiber optic and computer technology, virtual learning environments started to be maintained with these technologies (İşman, 2011).

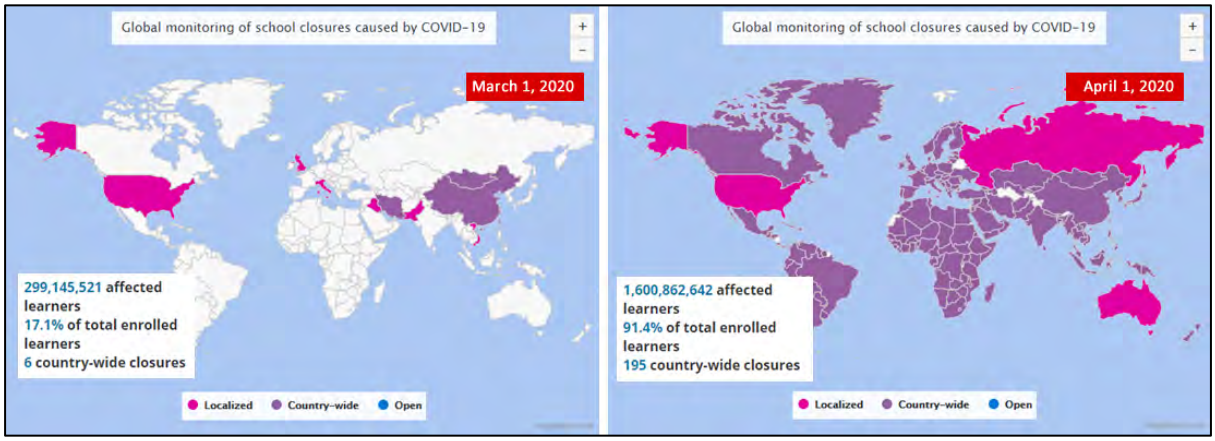

Figure 1. The Effect of COVID-19 Pandemic on Education in March and April (UNESCO, 2020)

In COVID-19 pandemic in Turkey, distance education was provided through television and the Internet by the Ministry of National Education. In this context, weekly course programs in primary and secondary schools were restructured and provided through Educational Information Network (EBA) and television. A national channel called EBA-TV has been opened for each level of education in distance education provided through television. In these channels, common courses have been taught according to the specified program. In addition, internet access has been provided from all telephone operators for EBA activities. Thus, students were supported to continue their education (MEB, 2020).

Distance education has many benefits such as ensuring the sustainability of education (Akinbadewa & Sofowora, 2020; Bruder, 1989; Omiles et al., 2019; Seage & Türegün, 2020), providing lifelong learning (Alharthi, 2020; Lou, 2004; Pambayun et al., 2019; Serhan, 2019) and reducing education costs (Al-Husban, 2020; Baggaley, 2008; Hall & Knox, 2009; Harrison & Lee, (2018) although the learner and the teacher are in different places but there are some limitations in terms of methods, schedule and time (Albalawi, 2018; Hannum, 2008; Hilton & Canciello, 2018; Thompson & McDowell, 2019; Uşun, 2006; Vu & Feinstein, 2017; Weinhandl et al., 2020). In addition, many factors such as lack of infrastructure (software, hardware etc.), economic reasons, technical staff problem, lack of awareness of the society and especially students in this regard, and regional differences in the level of utilization of information technologies are seen as obstacles to e-learning and accordingly distance education (Gökdaş & Kayri, 2005).

It can be argued that a different perspective such as "distance education during pandemic periods" has been added to the studies conducted for distance education with COVID-19. As a matter of fact, it is seen that the number of studies for distance education applications carried out in various parts of the world has increased day by day during the pandemic. One of the studies on this subject is the study by Arora and Srinivasan (2020). The study, conducted with 341 teachers in the Ghaziabad region of India, examined the adoption rate, benefits and challenges of distance education. As a result of the research, it was found that some teachers have positive opinions about distance education as well as emphasizing problems such as network problems, education and awareness. Another study evaluated university students' perspectives, attitudes and readiness to distance education during the pandemic (Lall & Singh, 2020). Results showed that students had a positive attitude towards distance education due to flexible learning opportunities. In their study, Xie and Yang (2020) examined the students' experiences of studying at home during the pandemic. The research introduced measures for students to study on their own and to study independently during the pandemic.

This study aims to examine the opinions of students and teachers about distance education provided during the COVID-19 pandemic. It reports views of students and teachers who are actively involved in the distance education process implemented by the Ministry of National Education for the first time at national level. In addition, it is expected that this research will contribute to studies to be carried out in areas such as educational technologies and distance education in order to carry out distance education efficiently and to make necessary arrangements or improvements. The literature review showed that the studies carried out within the scope of the subject are limited and the current studies generally covered undergraduate and graduate level university

students (Arora & Srinivasan, 2020; Lall & Singh, 2020; Gillies, 2008). This study is also important in terms of contributing to the related literature since it includes the opinions of students at different education levels and teachers of different branches.

The Aim of the Research

In this study, it was aimed to determine the views of students and teachers on distance education activities they participated in the COVID-19 pandemic. Thus, answers to the following two sub-problems were sought in line with this question "*What are the views of teachers and students on distance learning activities carried out in Turkey on a national scale during the COVID-19 pandemic?*":

1. What are the views of students on distance education activities carried out in the COVID-19 pandemic?
2. What are the views of the teachers on distance education activities carried out in the COVID-19 pandemic?

Method

This section includes research design, population, data collection tools, validity and reliability, research process, and analysis of data.

Research Design

This study, which examines the opinions of students and teachers about distance education applications conducted in the COVID-19 pandemic, is a qualitative research based on the case study. Case study is a qualitative approach where the researcher explores a real-life, contemporary bounded system or multiple bounded systems over time by collecting detailed, in-depth information and reports case themes and case descriptions (Creswell & Poth, 2016).

Participants

The sample of this research was determined by using convenience sampling method from non-random sampling types. The population of the research consisted of 20 students and 16 teachers in distance education activities. Demographic information of teachers and students is shown in Table 1.

Table 1. Demographic Information of Students and Teachers

	Variable	Category	f	%
Students	Gender	Male	9	45
		Female	11	55
	Education level	Secondary School	10	50
		High School	10	50
	Residence	City	12	60
		Province	3	15
		Village	5	25
		Total	**20**	**100**
Teachers	Gender	Male	8	50
		Female	8	50
	Branch	IT	7	43.75
		Turkish	4	25
		English	5	31.25
	Seniority	1-5 years	8	50
		6-10 years	5	31.25
		11-15 years	2	12.5
		16-20 years	1	6.25
	Type of school	Secondary School	9	56.25
		High School	7	43.75
		Total	**16**	**100**

Data Collection Tool

The data of the research were collected through structured interview forms. Structured interview forms allow for fast coding and analysis of data, ease of measurement and then allow comparisons with the scope of the research (Büyüköztürk et al., 2015). Within the scope of the research, separate interview forms were designed for teachers and students. In the first part of the two-part interview forms, there are questions regarding the demographic information of the participants. The second part includes eight open-ended questions, drafts of which were submitted to the expert opinion after related literature review by the researchers; and the final edits were made in line with the opinions of the field expert.

Research Process and Data Analysis

Structured interview forms prepared for collecting data were sent to the participants in electronic environment in order to maintain social distancing due to continuing COVID-19 pandemic during the research process. It was emphasized in the electronic form that there was no correct answer to the questions, the identity of the participants would be kept confidential and their answers would only be used for scientific purposes. Nicknames were used instead of the real names of the participants. Accordingly, students were coded as S1, S2, S3, and teachers were coded as T1, T2, T3.

The research data obtained were analyzed with the content analysis method, which is frequently used in qualitative research methods. Content analysis is a method that is effective in classification, edition and comparison of texts in order to make theoretical inferences (Cohen, Manion & Morrison, 2007). The data required for content analysis was analyzed with Google Sheets, which has the ability to work on the cloud. The answers were evaluated in detail by the researchers and codes reflecting the opinions of the participants were created. Then, related codes were grouped and themes and sub-themes were created. Finally, the process was concluded by interpreting the themes and codes associated with each other.

Validity and Reliability

Büyüköztürk et al. (2015) suggest that data should be examined by more than one person in order to increase the validity of qualitative research and member checking should be performed for reliability. For this reason, the data were examined by two researchers to ensure the validity of the research. Then, the inter rate reliability by Miles and Huberman (1994) was used. Miles and Huberman (1994) note that 70% or greater inter rate agreement is an acceptable level for the reliability of the research. The agreement rate in the study was 92%. Member checking has been done to ensure the reliability of the findings. In addition, the analyses were supported by the direct opinions of the participants.

Findings

Findings Regarding Students' Views

Students' views on distance education applications caused by COVID-19 pandemics were gathered under 5 themes. These are: (1) Views on distance education, (2) Advantages and disadvantages, (3) Problems encountered in distance education, (4) Education and training process, (5) Effects of distance education. The theme of views on distance education is divided into two sub-themes as positive opinions and negative opinions. The analysis resulted in a total of five codes, three in the negative opinions sub-theme and two in the positive opinions sub-theme (see Table 2).

Findings in the negative opinions sub-theme show that six students clearly have a negative opinion. It is clear that the basis of negative views is based on asynchronous education. One of the most important problems for students is the absence of a teacher, who can find solutions as soon as they have problems. The opinions of S7 regarding this are as follows: "*I think the situation has gotten worse because we can't ask what we don't understand because we don't have teachers. For example, I did not understand most of the lesson topics and therefore I could not do most of my homework.*" Similarly, S9 stated: "*It is a little bad because I was used to one to one education. I prefer to listen to the teacher in the classroom.*"

Table 2. Codes for the Theme of Views on Distance Education

Sub-theme	Codes	f	%
Negative opinions	No contribution	6	40
	Educational problems (Monotony, insufficient time, lack of expression/ inadequacy of the lessons etc.)	5	33.33
	Longing for the classroom environment	4	26.66
	Total	**15**	**100**
Positive opinions	Useful, but not as much as school	4	57.14
	Useful	3	42.85
	Total	**7**	**100**

We can see that some students' views focus on educational problems in distance education (n=5; 33%). The findings show that the educational problems mentioned are generally associated with problems related to lack of time and inadequacy of the lesson. Some of the student views on this subject are as follows: S12: "*The lesson does not appeal to students of all levels, but it does appeal to a fixed level, which makes the lesson simple. Boring*", S13: "*We are not used to distance education. That's why I have a problem focusing.*" S4:"*Class hours should be extended.*" Another issue that students emphasize is the longing for school and classroom environment (n=4; 26%).

The research findings also include the views of students who state that distance education is useful. These student ideas focus especially on following distance education from different sources and continuing education at home. Views of S10 on this issue are as follows: "*I can understand the lesson very well, I can follow it both on television and computer, the system is very good…*" Some students stated that this practice is the best education that can be done in these conditions for their health. S19: "*Education is going well to protect our health. I don't think there is a better alternative under these circumstances.*" Most of the students made comparisons between distance education and face-to-face education and they were in a "better than nothing" attitude in these conditions where face-to-face education is not possible. Some student views on this subject are as follows: S3: "*Although it is not as good as face to face, it is good for me.*", S2: "*I can say that it is good although not as much as at school.*"

The theme of advantages and disadvantages is divided into two sub-themes: advantages and disadvantages. Analysis of students' views shows that diversity is more in the advantages sub-theme. As a result of the analyses, a total of 11 codes were identified, six in the advantages sub-theme and five in the disadvantages sub-theme (see Table 3).

Table 3. Sub-themes and Codes related to the Advantages and Disadvantages Theme

Sub-theme	Codes	f	%
Advantages	Course process (Efficiency, professionalism, short and concise lessons)	7	38.88
	Continuing education at home	3	16.66
	Access with different tools (TV, EBA)	3	16.66
	Resource diversity	2	11.11
	Comfort	2	11.11
	Self-control	1	5.55
	Total	**18**	**100**
Disadvantages	Inadequate lessons	8	40
	I don't understand what teachers are teaching	5	25
	Technical and technological disadvantages (Hardware requirement, Being intertwined with electronic tools, technical problems)	3	15
	No classroom environment	2	10
	There is nothing I don't like	2	10
	Total	**20**	**100**

The advantages theme sub-theme in Table 3 shows the students' views on the course process (n=7; 38%). Thus, it is seen that the most frequently expressed concepts are continuing education at home, studying efficiently and accessing with different tools. Some of the students' views on these topics are as follows: S4: "*It is a great advantage that we can follow and watch the courses both from EBA and EBA TV.*" S8: "*To be able to study more efficiently…*", S7: "*It is good to be able to find solutions for homework and video narration in EBA academic application…*"

Another advantage is that the lessons are short and concise. Some views on this issue are as follows: S14: "*We only have 2 lessons per day.*", S19: "*Lessons take 20 minutes…*", S5: "*The lessons do not last long, that is to say they are short but concise.*" One of the concepts that students emphasize is comfort. Although many students stated that they miss the school and classroom environment, some students expressed that they love being able to study at home. S12 explained that distance education contributes to the development of self-control skills in students as follows: "*We can set up our own system more comfortably and we study. This provided the ability to plan and control our own tasks.*"

The disadvantages of the distance education process are the inadequacy of lessons (n=8; 40%). The inadequacy mentioned was evaluated by students from different perspectives. For example, S12 suggested that the educational problem stems from the new system they are not accustomed to: "*The lessons are not taught the way we are used to. This reduces our productivity...*" S6 explained the difficulty he or she faced as follows: "*Some of the lesson subjects are difficult to understand.*" Another student (T13) stated that she had a problem in reinforcing what he or she learned, "*The number of examples given to mathematics questions is low.*"

Another issue that students consider as a disadvantage is that they do not understand anything in the lessons of the teachers. According to student views, this problem arises from the fact that teachers cover the topics quickly. Some student views on the subject are as follows: S15: "*The teachers on TV give lectures very quickly*." S16: "*I cannot take notes due to the quick lessons*", S20 "*Lessons pass very fast, there is no other problem*." S20 "*The only problem is that the lessons pass very quickly*." Other disadvantages mentioned by the students are that they stay away from school, they are exposed to technological items too much and not everyone can access these technological tools.

In the theme of problems faced in distance education, the problems faced by students during the distance education process were discussed. It is noteworthy that most of the problems experienced in this theme, which consists of five codes in total, are related to the process of understanding the lesson and access to resources (see Table 4).

Table 4. Codes for the Theme of Problems Encountered in Distance Education

Codes	**f**	**%**
Problems related to the course process (adaptation, speed of lectures, incomprehension)	8	38.09
Access problem	5	23.80
No problems encountered	5	23.80
Being away from school	2	9.52
No suitable environment studying	1	4.76
Total	**21**	**100**

Table 4 shows that the problems experienced by students are generally related to the process of understanding the lessons (n=8; 38%). It is noteworthy that the findings obtained with this theme are similar to the previous disadvantages sub-theme. It is seen that the problems experienced by the students during the lesson process are caused by reasons such as adaptation to a different learning environment, quick and incomprehensible lessons. In this regard, S8 stated that the lesson was covered quickly as follows: "*The topics are taught very quickly and I have problems as I cannot review topics, I have difficulty understanding."* S9 talked about the problem of understanding topics as follows: *"When I don't understand the subject, I can't ask questions and I have to listen all over again and sometimes I still don't understand."* Another student (S5) emphasized the problems arising from a different teaching environment: *"The system we are accustomed to in school is no longer available and teachers are different ..."*

One of the problems frequently voiced by students is the access problem to EBA (n=5; 23%). The expressions of some students who have problems in accessing EBA show that the current problem is sometimes caused by the system and sometimes by the lack of technology skills or equipment. Students' views on this subject are as

follows: S10: "*I sometimes cannot access the EBA system*", S18: "*I cannot enter EBA in distance education*", S1: "*I cannot enter EBA via smart phone because we don't have internet.*" Other problems raised by students are the absence of study environment and distance from the school environment. 25% of the students stated that they did not encounter any problems in the process.

The theme of education and training processes is divided into three sub-themes: opinions about courses, opinions about teaching activities and adaptation to distance education. Sub-themes consist of four codes regarding the opinions about the course process, five codes regarding the opinions about teaching activities and four codes in the adaptation to distance education sub-theme, which makes 13 codes in total (see Table 5).

Table 5. Sub-themes and Codes regarding the Theme of Education and Training Processes

Sub-theme	Codes	f	%
Opinions about the course process	Insufficient time	8	38.09
	Quite good	7	33.33
	Successful despite some setbacks	4	19.04
	Time is enough	2	9.52
	Total	**21**	**100**
Opinions about teaching activities	Lessons are good	9	37.50
	Lessons not understood	7	29.16
	Lessons are very fast	5	20.83
	Some teachers are very good and some are bad	2	8.33
	Monotony	1	4.16
	Total	**24**	**100**
Adaptation to distance education	I adapted	9	32.14
	I find it difficult to adapt	8	28.57
	Subject revision, additional study and homework	8	28.57
	Longing for the school environment	3	10.71
	Total	**28**	**100**

There are criticisms of students about the duration of the lessons in the sub-theme of the course process (n=8; 38%). Some students' opinions on this subject are as follows: S9: "*Although the duration of the lessons is very good, the time allocated for Mathematics should be longer…*", S13: "*The course is fluent and good, the materials are sufficient, but the lessons are short*", S14: "*Course duration may be a little longer.*" However, some students argued that the short class hours were better: S10: "*I think the lectures are very nice, short and understandable*", S11: "*I think short class hours are good, otherwise we wouldn't have been able to understand.*"

There are mostly negative opinions in the sub-theme of the opinions on teaching activities. However, considering the codes separately, it can be said that teaching activities are successful (n=9; 37%). Some of the students' views that are satisfied with the process are as follows, S5: "I think it is sufficient and regular, well enough", S13: "*The fact that our teachers who teach mathematics is skilled encourages us to that lesson*". However, some students seem to have problems in lessons. S7: "*I don't understand most of what is told in the lesson*" S16: "*I think they explain the subject well but fast*". S12 explained that it is a big problem for the lessons to be addressed to the general public and explained the necessity of alternative courses as follows, "*I think teachers' lectures should be very diverse and different, students should be able to listen to the lessons they want. Thus, everyone can find the appropriate teacher and system."*

In the sub-theme of adaptation to distance education, it is seen that there are opposite views in close numbers. In this sub-theme, 9 students (32%) stated that they adapted well to the education but 8 students (28%) stated that they could not adapt or had difficulty in adapting. Some of the students' views that stated that they did not have difficulty in adapting to the distance education process are as follows: S19: "*I have studied the lessons and have not had any difficulty in any part*", S13: "*I haven't had much difficulty so far.*" S12: "*I did not have difficulty. Because I continue to study, I am doing additional studies. That's why I adapted easily.*" Considering the theme of adaptation to distance education in general, it is one of the remarkable findings that the students who make revisions and do additional studies adapt to the education more easily than others.

We can see that some students could not adapt due to various problems. These problems can be classified as quick lectures, technical problems, lack of motivation, longing for the school environment, following the lesson on television. S6: "*I could not adapt, it is not like the lessons at school.*", S17: "*I tried to both watch and follow it from the book at the same time…*" S7: "*I have never been able to enter EBA because it gives errors.*" A large number of students also stated that they did homework and made revisions to adapt to the education process. S10 added: "*I have studied on the topics I had fallen behind and did my performance homework.*", S4 stated: "*I solved tests and made revisions.*"

In the theme of the effect of education, the effects of the courses taken via distance education on the future of students and their education life were examined. Thus, the data obtained appear to be mostly positive. Five codes were identified as a result of the analysis of the data (see Table 6).

Table 6. Codes on the Theme of the Effects of Distance Education

Codes	**f**	**%**
Positive effect	8	44.44
No effect	4	22.22
Better than nothing	3	16.66
Awareness and experience	2	11.11
Should support face-to-face education	1	5.55
Total	**18**	**100**

Table 6 shows that the majority of students think that distance education applied will have a positive effect on them in the future (n=8; 44%). Some positive student opinions are as follows: S14: "*It can have positive effects in my future life. Because at least the lessons are taught*", S10: "*I am sure that listening to the lessons with their pros and cons will have positive effects in the future.*" S15, on the other hand, addressed a different aspect of the benefit of the process: "*I arrange my day according to the lessons according to the topics on television, for example, I get up early, I take the textbooks and wait until 10 am.*" Some students think that the process has had no significant contribution (n=4; 22%). One of the students with this idea stated that general revisions are needed when life goes back to normal because distance education is not very efficient: "*A quick revision will be mandatory. Because overall lesson efficiency is lower than class efficiency.*" Another student (S17) explained that the process made no contribution and constant exposure to technological tools was annoying: "*I don't think it has a positive effect. I rarely watched a lecture video from YouTube when schools were open. Now I have to watch it every day.*"

Findings Regarding Teachers' Opinions

The opinions of teachers from various seniorities, ages and branches about distance education are examined under this title. 5 themes have been identified as a result of the analysis of data consisting of teacher views. These are: (1) Opinions on distance education, (2) Advantages and disadvantages, (3) Effect on education process and student (4) Course and content, (5) View on the future of distance education and technology. The theme of views on distance education is divided into two sub-themes as positive opinions and negative opinions. As a result of the analysis, a total of seven codes were identified, four in the positive opinions sub-theme and three in the negative opinions sub-theme (see Table 7).

Table 7. Codes for the Theme of Views on Distance Education

Sub-theme	**Codes**	**f**	**%**
Positive opinions	Useful but not useful as much as school	6	35.29
	Successful under these circumstances	6	35.29
	Students are involved in class activities	3	17.64
	No other alternative	2	11.76
	Total	**17**	**100**
Negative opinions	Interaction and productivity issues	3	50
	Infrastructure and technical problems	2	33.33
	No equality of opportunity	1	16.66
	Total	**6**	**100**

There are many teachers' opinions showing that the distance education process is successful in the positive opinions sub-theme. T16 explained that the current system is a good decision, even though it has several problems: "*Distance education is one of the best decisions made in this process. I can say that it is fine except for technical problems, students not accustomed to this and infrastructure problems.*" T8, another teacher with similar opinions, stated that: "*It is a correct decision taken and implemented in the process, but getting feedback is troublesome. It is not a system where student follow-up can be done completely, but it is one of the best practices in such extraordinary situations.*" Some teachers emphasized that there were no other alternatives in the epidemic conditions. T3: "*Successful and appropriate under these conditions*", T4, on the other hand, said that the classroom environment is more important than anything else: "*There is no other alternative during the pandemic. But no distance education can be as effective as the classroom environment.*"

Some of the teachers' views emphasize that distance education cannot be as effective as school, but it is important that students continue their education life. Some of the teachers' views on this subject are as follows: T1: "*Although it is not possible to be as efficient as school, I find it valuable for children not to stay away from education*", T2: "*I find it useful, if not as much as school, at least the students are not completely disconnected from school and lessons*" and finally T14: "*In such a period when we are away from school, I find it effective in terms of keeping children in touch with the lessons, if not as much as the material school environment.*"

The negative views sub-theme shows that interaction and productivity problems are the main problems. Emphasizing the importance of teacher and student being in the same environment, T10 explained the situation as follows: "*The fact that the teacher and the student cannot share the same physical environment limits the interaction and reduces the level of efficiency.*" T5, in a similar statement, stated that the use of materials is important as well as interaction and efficiency as follows: "*Online course can never replace regular education. The material used and the interaction are limited.*" Some teachers emphasized technical and infrastructure problems. A teacher stated that there are students who cannot access services such as television, computer, smart phone and internet to receive education because of the low purchasing power in rural areas, which also leads to inequality of opportunity.

The theme of advantages and disadvantages is divided into two sub-themes. Research findings show that teachers report more on the advantages of distance education. Thus, a total of 11 codes were identified, with five in the advantages sub-theme and six in the disadvantages sub-theme (see Table 8).

Table 8. Sub-themes and Codes related to the Advantages and Disadvantages Theme

Sub-theme	Codes	f	%
Advantages	Lessons (Expert support, planned and programmed training, equal opportunities etc.)	10	47.61
	Sustainable education	5	23.80
	Self-control	2	9.52
	Collaboration and interaction	2	9.52
	Using technology in different areas	2	9.52
	Total	**21**	**100**
Disadvantages	Lessons process (interaction, insufficient time, expression problems)	6	35.29
	No problematic aspect	4	23.52
	Not all lessons included	2	11.76
	Difficulty in student follow-up	2	11.76
	Infrastructure problems	2	11.76
	Restriction/ Being Restricted	1	5.88
	Total	**17**	**100**

The positive opinions of some teachers about the short duration of the lessons and out-of-class activities are as follows: T4: "*I think 20-minute lessons are a very good decision. It would distract children if it took longer. Also, it is an advantage to have lessons via TV because it provides access to all students*", T5: "*I find it positive to have hours of out-of-class activities*", T6, who argued that it is important to keep students in the education and training environment, stated: "*It is good to keep students active in the process and encourage them and to continue with lessons despite some limitations*", T10, which shows a different advantage of the process, stated that this period will contribute to the development of students' self-learning and planning skills: "*Students have*

more for themselves and their personal development. There has been progress in planning and evaluating leisure time." Other opinions obtained from the teachers are about cooperation and communication, the use of technological tools for education (awareness) and the execution of the lesson process in a plan by experts.

When the disadvantages of the distance education process are examined, it is seen that the most frequently expressed problem by the teachers is the lack of interaction (n=6; 5). Some of the teachers' views on this subject are as follows, T4: "*There is no interaction, which is an important problem. A synchronous live broadcast will be much more effective for the students*", T14: "*A safe program similar to the Zoom program inside the EBA program will be more useful as it allows interaction with students.*" Another feature that is found insufficient by the teachers is that all lessons are not available and student follow-up is not possible. Some of the teachers' views on this subject are as follows, T1: "*I don't think the situation is very negative. It is a disadvantage that only certain courses are included since the process is exam-oriented. I think that all courses should be included. Another point is that, teachers do not take attendance, which is an important issue*", T10: "*There are difficulties in terms of student follow-up…*" Other disadvantages mentioned by teachers are problems arising from infrastructure, insufficient time, restrictions by administrators and that the lessons do not appeal to students at different levels.

The theme of the impact on education and the student is divided into two sub-themes. In this theme, the effects of distance education activities on students and education were evaluated. As a result of the analysis, a total of 12 codes were identified, six of which were in effect on the student sub-theme and six in effect on education sub-theme (see Table 9).

Table 9. Sub-themes and Codes on the Theme of Impact on Education Process and Student

Sub-theme	**Codes**	**f**	**%**
Effect on the student	Damage to student-school/education relationship	4	30.76
	Sociological and psychological impact	3	23.07
	Sustainable education	2	15.38
	Sluggishness/Loss of motivation	2	15.38
	Student-teacher relationship	1	7.69
	Self-control skill	1	7.69
	Total	**13**	**100**
Effect on education	The importance of distance education	7	43.75
	Using technology in education	3	18.75
	No significant negative effects	2	12.50
	E-content and in-service training	2	12.50
	Technology and infrastructure	1	6.25
	Curriculum change	1	6.25
	Total	**16**	**100**

Most of the teachers stated that awareness of distance education will cause new developments in this field. Some of the teachers' views on the subject are as follows, T4: "*Big steps have been taken to give technological tools more effective place in education, and further development will be achieved…*", T5: "*… will have consequences that will affect all of humanity. It will affect all topics such as e-commerce and different professions of the future. Perhaps distance education activities will increase in this way without the need for a teacher because it provides a great advantage for students in their comfort zone.*" Other codes addressed in the impact on education sub-theme are technology and infrastructure, curriculum change, e-content and in-service training. Teachers think that there is a need for improvements to be made in line with the effects on these areas.

The student sub-theme draws attention to the negative effects of the process. In this context, the most prominent damages are the effect of the process on the students' relationship with school and education (n=4; %30) and the sociological and psychological (n=3; %23) effects on the students. Some of the opinions of the teachers about the effect of the process on the students are as follows, "*Children are going through difficult times in this process, both psychologically and socially*", T11: "*The relationship with the school has come to an end.*" Some teachers pointed out on students' loss of motivation caused by the process (n=2; 15%). T14: "*They are in a compulsory distance education process. I see that some are anxious and some miss the school environment. It*

will surely lead to sluggishness among students." The fact is that education is sustainable under these conditions, the development of students' self-control skills and the relationship between students and teachers have been evaluated as positive effects of the process by teachers.

In the course and content theme, the views of teachers regarding the course process in distance education were examined. This theme, consisting of four codes, covers topics such as duration, material use and content (see Table 10).

Table 10. Codes related to the Course and Content Theme

Codes	f	%
Needs to be developed (Material use, interaction, exam support etc.)	10	47.61
Duration	6	28.57
Sufficient	3	14.28
Education level	2	9.52
Total	**21**	**100**

Opinions about course and content contact are generally positive. However, it was stated by many teachers that eliminating some problems might increase efficiency (n=10; 47%). Teachers emphasized the concept of interaction. T5: "*I find the lesson and content sufficient. However, I would like to increase the question and answer activities to involve the students in the lesson*", T15: *"...children need concrete learning by doing and living. In distance education, we can achieve this up to a certain point...*", T1: "*It is a disadvantage to only use the method of reading the articles written in the form of presentations on the smart board. Different environments should be created that may attract students' attention.*"

There are different opinions about the duration of the lesson (n=6; 28%). Although the majority stated that the duration was sufficient, some teachers stated that the duration was limited. T2 stated the following this on the subject, "*I think the time is not enough. I also think that the lecture appeals to a higher level. A medium level instruction would be better.*" T1 explained that the time is sufficient, otherwise there would be problems in focusing: "*I think the duration of lessons is ideal. It does not seem possible to attract children's attention in front of a screen for a longer time…*"

In the theme of the future of distance education and opinions about technology, teachers' views on the future of distance education and the effect of the current process on them have been determined. This theme was examined under two sub-themes: the future of distance education and opinions about technology. A total of seven codes were identified, four in the distance education sub-theme and three in the opinions about technology sub-theme (see Table 11)

Table 11. Sub-themes and Codes related to the Future of Distance Education and Opinions about Technology

Sub-theme	Codes	f	%
The future of distance education	More effective and widespread use	9	52.94
	Cannot replace face-to-face education	4	23.52
	Technology and infrastructure should be strengthened	3	17.64
	Supportive role	1	5.88
	Total	**17**	**100**
Opinions about technology	The importance of educational technologies	7	41.17
	No change	5	29.41
	Conscious use of technology	5	29.41
	Total	**17**	**100**

Teachers' opinions on the future of distance education are optimistic. Nine teachers (52%) stated that distance education will be used more widely and effectively in the future. Some of the teachers' views on this subject are as follows: T16 "*The future of distance education is bright. Studies in this field will increase. Students will also get used to distance education*", T13: "*Distance education will be an indispensable education model in the future.*" However, some teachers explained that distance education will not be as common and effective as face-

to-face education, T1: "*I do not think it will replace the school. We have seen that it is important as a supporter in this process. This issue should be given importance by strengthening the infrastructure*", T2: "*I think it is useful, but it is obvious that it will never replace traditional education.*" Some teachers, on the other hand, emphasized that it will not be successful at the moment due to infrastructure and technological deficiencies.

The view on the distance education process towards technology is examined under the sub-theme of "opinions about technology". The most important issue that teachers emphasize directly or indirectly in the process was the importance of educational technologies (n=7; 41%). T13 stated that the process is an opportunity for teachers to improve themselves: "*We have witnessed that teachers who have problems using even a Word document on a computer try to adapt to online environments. Of course, I think it is a positive process. I think many teachers who think they can't do it have improved themselves.*" T6, sharing similar opinions, said: "*I think that it causes screen addiction among students and teachers, but also that teachers are improving themselves in the field of technology in order to use technology effectively and be useful to their students, and that they realize that technology is actually useful with correct use."*

Discussion and Conclusions

COVID-19, which started in December 2019 and became a pandemic all over the world in a short time, affected the education sector as well as fields such as health, economy and tourism. Many countries around the world have temporarily closed educational institutions in an attempt to control the spread of the COVID-19 pandemic. These nationwide closures have affected more than 91% of the world's student population. As of the end of April, it is seen that approximately 1.6 billion students have been affected (UNESCO, 2020).

Research results show that students' views on distance education are not clearly separated from each other. However, when it is examined in detail, it is noteworthy that there are more students who are not satisfied with the education. These results are similar to the research conducted in Turkey COVID-19 pandemic by University and Research Laboratory Assessments (UNIAR) (UNIAR, 2020). This research conducted at the level of higher education has found that students experience problems in preparation for distance education and courses. When the literature is reviewed, it is seen that there are many studies that reveal similar results (Akgün, Güleç, & Topal, 2013; Gillies, 2008; Hannay & Newvine, 2006). In this research, students who were not satisfied with distance education explained the reason for their dissatisfaction as a result of not understanding the subject, finding the teacher inadequate, inadequate time, and lack of infrastructure.

In a study conducted by Lall and Singh (2020), it was concluded that although students favor distance education, they are not satisfied due to the lack of synchronous educational activity and lack of communication. Similar results were found in this study. It was found that some students stated that they failed to understand the subjects of the lessons and were not satisfied with the teachers. The problem mentioned here can be divided into two, arising from the students and the teachers. It is thought that the problem may be caused by the students not being able to study enough or adapting to the process, as well as the inadequacy of teachers in some fields. When it is handled from another perspective, the teacher has a large share in providing an interactive environment for the students to get involved in the learning environment (Lehman & Conceição, 2010). A study by Dougiamas (2000) revealed that instructors who teach courses in distance education affect students' views. This shows that teachers who carry out course activities have a great responsibility in distance education process.

Teachers, unlike students, viewed distance education more positively. Teachers highlighted the positive aspects of distance education process and drew attention to the importance of sustaining education. Apart from this, it is seen that they emphasize different advantages such as distance education being planned and programmed and ensuring equality of opportunity. Li, Zhou, and Fan (2014) see distance education as an important tool to ensure equality of opportunity in less developed regions. However, Lau, Yang, and Dasgupta (2020) state that the successful implementation of distance education brings along infrastructure and equipment needs, which cause problems for individuals with low socioeconomic status. Thus, these two contradictory situations are among the results of the research.

It is known by many researchers that high level of interaction and social communication cannot be achieved easily in distance education as in face-to-face education (Kaya & Önder, 2002). Within the scope of the research, the most important problem that teachers who are dissatisfied with distance education draw attention is the lack of interaction. In the literature, there are studies with similar results (Chen et al., 2001; Jin, 2005). One of these is the research conducted by Barış and Çankaya (2016). The results of their study suggested that the

lack of interaction is the biggest disadvantage in distance education. In another study, it was emphasized that distance education is not suitable for informal, spontaneous and open discussion (Delaney et al., 2004). In the study conducted by Arora and Srinivasan (2020), it was concluded that the lack of interaction in distance education is associated with low participation, lack of communication and connection problems. In another study conducted by Özköse, Arı and Çakır (2013), interaction emerged both as an advantage and a disadvantage unlike other research. The reason for the lack of interaction criticized by teachers in this study can be explained by the fact that asynchronous education is mostly preferred rather than synchronous education. In addition, it can be said that as the preparations for distance education were completed in a short time and that teachers and students were not prepared for this situation, problems occured. Some researchers suggest that problems can be solved by training teachers and students (Chakanyuka et al., 2008; Özköse, Arı & Çakır, 2013).

Distance education, was carried out from two different channels in Turkey, the internet and television. While education activities carried out on television were asynchronous, some of the activities carried out over the internet were synchronous through Education Informatics Network (EBA). In this research, many students and teachers proposed live broadcasting to solve the interaction problem in education. However, the high number of students and the lack of sufficient internet connection and infrastructure in rural areas limit live broadcasting opportunities. Wilson and Whitelock (1998) state that some problems arising from both the lack of internet infrastructure and technical staff may affect education activities negatively in distance education systems.

One of the most important factors affecting the quality of distance education is the quantity and quality of learning and teaching resources and materials (Chao, Saj, & Tessier, 2006). According to Lloyd, Byrne, and McCoy (2012), the effectiveness of distance education is closely related to pedagogical and material support in the process. When the results of the research are examined, it can be argued that students have opposite views about lessons. While some students found their education and training courses successful, some students found lessons unsuccessful for various reasons. However, it is one of the remarkable results of the research that no student has a negative opinion about the use of materials. Teachers, on the other hand, think that the use of materials is insufficient and that the number of qualified materials should be increased. According to Al-Samarraie et al. (2017), educational materials that will attract students' attention are of great importance in ensuring continuity of learning in distance education. According to Seaman (2009), low-quality materials can serve as the basis for negative views on distance education.

In the research, it was seen that some teachers frequently stated that distance education could never be as effective as face-to-face education. It is thought that the reason for this is that the seniority of the teachers who hold this view is over ten years and they have not had any experience in distance education before. There are many studies in the literature showing that there is a negative relationship between online teaching experience and resistance to online teaching (Alshangeeti, Alsaghier & Nguyen, 2009; Lloyd, Byrne & McCoy, 2012). Despite all these, distance education applications should not be seen as an alternative to traditional education, but an educational technology application that complements traditional education (Usun, 2006). According to Palloff and Pratt (2000), technology is not sufficient alone in distance education. The researchers stated that the most common mistake made in this direction is that the lessons are not organized and transferred with the help of technology. Omoregie (1997) argued that the effectiveness of lessons in distance education is related to the preparation for the lesson and the instructor's being aware of the needs of the target group.

With the results obtained from this research, students' and teachers' views on distance education activities conducted during COVID-19 pandemic were examined. In this context, the educational activities in the process were evaluated by taking opinions from students and teachers who are at the center of education and training activities. Considering that distance education has an important place in education and training activities, it is thought that these research results will shed light on the studies to be conducted for the design and use of distance education environments at all levels of education. Within the framework of all the results obtained, it is foreseen that the courses and programs designed with different models for distance education will become more and more widespread. For this reason, teachers and students, especially educational institutions, should be prepared for these environments. Trainings can be carried out so that teachers and students can adapt to distance education more easily, and the necessary infrastructure support can be further strengthened to eliminate technical problems. It is known that private schools carry out additional applications in this period. For this reason, the findings of the study can be compared with the findings of another study in which private school students' opinions are gathered, or the students in the two groups can be compared and evaluated in terms of various variables. In this study, students' and teachers' views were discussed. In other studies, the views of parents who spent this process with their children can also be examined. By comparing distance education programs run by different countries, strengths and weaknesses can be revealed.

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Author Information

Mustafa Tevfik Hebebci
Ph.D.-Necmettin Erbakan University
Turkey
Contact e-mail: *mustafahebebci@gmail.com*

Yasemin Bertiz
Kırklareli University
Turkey

Selahattin Alan
Selçuk University
Turkey