Open
Schools
Journal

For Open Science

VOLUME 5 - ISSUE 2 - 2022
ISSN: 2623-3606

Evaluation of High School Students' Perceptions and Views on Distance Education During COVID-19 Pandemic

Öykü Çelik

To cite this article:

Evaluation of High School Students' Perceptions and Views on Distance Education During COVID-19 Pandemic

Öykü Çelik, Bahcesehir College Science and Technology High School, Samsun, Turkey

Summary

The COVID-19 disease, which spread all over the world and caused a pandemic, disrupted education the most. Countries had to quickly switch to the distance education model in schools and universities in order to prevent the spread of the epidemic. In our study, in which we evaluated the perceptions and views of high school students about distance education, almost two-thirds of the students stated that distance education is not an adequate and effective learning model. Despite the fact that today is the age of technology, students' reporting that a more effective learning will be achieved with face-to-face education shows that the distance education model should be developed and improved.

Key words: COVID-19, distance learning, high school, pandemic

Introduction

The new coronavirus disease-19 (COVID-19) first emerged in Wuhan province of China during early December 2019 and spread almost all over the world within two months, causing a pandemic. The World Health Organization declared the COVID-19 disease as a pandemic on March 11, 2020, and the first cases were seen in Turkey on the same dates. The COVID-19 pandemic, which spread rapidly and caused various crises in the global context, disrupted

education the most. According to UNESCO data, as of April 17, 2020, schools were closed in 191 countries around the world and nearly two million students were affected by this process.

After the first cases were seen in Turkey, the Ministry of National Education suspended education for one week in primary, secondary and high schools and for 3 weeks at universities as of March 16, 2020. However, due to the rapid progression of the epidemic, it was decided to cancel face-to-face education in the spring of 2020 and to conduct education via distance education. Subsequently, the 2020-2021 academic year had to be continued in a mixed manner. In the pandemic era, due to the interruption of face-to-face education, the obligatory transition to the distance education model was carried out with a rapid crisis management in order not to disrupt the education process, which caused some unforeseen disruptions. In this process, the Ministry of National Education tried to carry out lessons in primary, secondary and high schools through a state-affiliated television channel, while private schools tried to continue education and training by using their own remote access systems.

The aim of this study is to determine the most effective ways of reaching high school students and the social sharing platforms used during the COVID-19 pandemic process, to evaluate the devices they use within the scope of distance education and this education process. Our study basically aims to help what needs to be done in case distance education recurs in the future by revealing how students are affected by this process in the distance education process.

Methods

After obtaining the necessary permissions, the research was conducted with a total of 483 students studying distance education in three private high schools in the Black Sea region in the 2020-2021 academic year. Participation rates in the survey; Samsun Bahcesehir College was 62.3% (274/440), Ordu Bahcesehir College was 68.4% (130/190), Corum Bahcesehir College was 100% (79/79), respectively. This cross-sectional study was carried out with a structured questionnaire consisting of 39 questions applied on the internet between 1-18 June 2021.

The questionnaire form prepared using the "Google Forms" application was sent to the volunteer students who wanted to participate in the study by sharing the link. The questionnaire used in the research consists of three parts. In the first part of the questionnaire, demographic data and

educational information of the students were evaluated. In the second part of the questionnaire, questions were asked about which social media platform the students used before and during the pandemic, the time they spent on social media, whether they watched television and the time spent in front of TV, access to distance education and the problems they experienced.

In the last part of the questionnaire, the Distance Education Attitudes Scale (DEAS), which was developed by Agir (2007) in their master's thesis study and where students can evaluate distance education in all aspects, was used. This scale consists of 21 questions, 14 of which are positive and 7 of which are negative, in 5-point Likert type. Participants were asked to answer the questions using options "Strongly disagree, Disagree, Unsure, Agree, Strongly agree." Scoring the scale; positive questions are scored as 5, 4, 3, 2, 1 ranging from option "Strongly Agree" to option "Strongly Disagree," while negative items are contrarily scored as 1, 2, 3, 4, 5 ranging from "Strongly Agree" option to "Strongly Disagree" option. Therefore, the lowest score that can be obtained from the scale is 21 and the highest score is 105. The score the participant gets from the scale determines their approach towards distance education. A high score from the scale means that students' approaches towards distance education are positive, and a low score means that they are negative.

Results

A total of 483 students, 48.4% (n=234) of which are male and 51.6% (n=249) of which are female, participated in the survey. 56.7% (n=274) of the students reside in Samsun, 26.9% (n=130) in Ordu, and 16.4% (n=79) in Corum. In addition, 5.8% (n=28) of the students participating in the survey were in the preparatory class, 41.2% (n=199) of them were in the 9th grade, 25.3% (n=122) of them were in the 10th grade, 21.3% (n=103) were in the 11th grade, and 6.4% (n=31) were in the 12th grade. The ages of the participants ranged from 13-19, with an average age of 15.8 years.

In our study, it was determined that 58.8% (n=284) of the students participated in distance education and 40.2% (n=199) participated in both distance and face-to-face education. 77.2% (n=373) of the students participating in the survey had siblings and 70.9% of which were taking

distance education. When the participants with siblings were asked "whether the devices they use are mutual or not"; they stated that only 4.5% share their devices.

When the participants were asked which social media platform they used most frequently before the pandemic, they stated that they use; Youtube (94.6%; n=457), WhatsApp (94.4%; n=456), Instagram (83.6%; n=404), Snapchat (49%; n=237), Twitter (29%; n=140), Facebook (8.7%; n=42) respectively, and it was determined that only 5 students did not use social media platforms. The average time spent on the social media platform before the pandemic was 2.84 hours/day (30 minutes/day-12 hours/day).

When the participants were asked which social media platform they use most frequently during the pandemic period, the stated that they use; WhatsApp (92.5%; n=447), Youtube (90.7%; n=438), Instagram (77.4%; n=374), Snapchat (53.4%; n=258), Twitter (50.5%; n=244), Facebook (9.9%; n=48) respectively, and it was determined that 5 students did not use any of the social media platforms. The average time spent on the social media platform during the pandemic period was 5.02 hours/day (30 minutes/day-18 hours/day).

When the participants were asked whether they watched TV before and during the pandemic and the time they spend watching TV; they stated that 62.9% (n=304) of the participants watch television. The time spent by the participants on television before and after the pandemic, respectively; mean of 53.4 min/day (20 min/day-7 hr/day) and 1.04 hr/day (30 min/day-6 hr/day).

Devices used by the participants in distance education are; 53.5% (n=258) laptops, 17.6% (n=85) tablet computers, 14.9% (n=72) smartphones, 14% (n=68) desktop computers, respectively and 94.5% of the participants stated that devices they use were their own.

When participants were asked about the technical problems they experience during distance education, the answers received are as follows, respectively; 88.8% (n=429) internet and connection problems, 34.3% (n=166) system-related problems, 26.1% (n=126) not being able to log in to the system, 13.9% (n=67) hardware deficiency in the devices they used. Only 3 students stated that they did not have any problems.

When asked perhaps the most important question of the survey, whether distance education system during the pandemic is a sufficient and effective learning model, responses of the

participants were 58.2% (n=281) no, 31.1% (n=150) yes, 10.7% (n=52) unsure. When the attitude scale towards distance education that we used to examine this question is evaluated, we found that the mean score was 57.9 (33-83). It was seen that this score was 57.83 (33-83) for male students and 57.84 (33-83) for female students. When the score is compared between classes; 57.73 (33-83) in the preparatory class, 57.82 (33-83) in the 9th grade, 57.84 (33-83) in the 10th grade, 57.77 (33-83) in the 11th grade, 57.8 (33-83) in the 12th grade.

Table 1: The distribution of the participants' answers to the Distance Education Attitudes Scale.

QUESTIONS	SD	NA	UN	AG	AAG
1) Distance education is more effective than face-to-face education.	39.9%	40.3%	14%	3.9%	1.9%
2) Learning with distance education is more enjoyable than learning with face-to-face education.	36.6%	35.3%	16.3%	7.9%	3.9%
3) Quality results are obtained from distance education applications.	24.4%	29.8%	29.5%	14.5%	1.9%
4) Getting the results of measurement and evaluation in distance education immediately increases student motivation.	15.3%	18.8%	36.8%	25.4%	3.7%
5) Distance education provides the flexibility to repeat as many times as desired.	15.1%	23.3%	21.9%	33.9%	5.8%
6) The absence of time and place restrictions in distance education ensures the continuity of education.	16.9%	24.4%	19%	33.9%	5.8%
7) Equality of opportunity is provided by distance education.	39.7%	33.7%	17.4%	7.2%	2.1%
8) Distance education provides effective learning through audio, visual designs and technology.	14.3%	25%	25.4%	30.4%	5%
9) Access to information is fast in distance education due to the sharing of knowledge on the internet.	6.8%	9.5%	19.2%	51.4%	13%
10) With distance education, the success processes	22.7%	28.5%	24.2%	21.7%	2.9%

	SD	NA	UN	AG	AAG
of individuals can be tracked more easily.					
11) Distance education does not interest me at all.*	9.5%	22.1%	28.5%	19.8%	20%
12) Face-to-face interaction is necessary for the best training to take place.	2.5%	5.8%	13%	36.2%	42.6%
13) Distance learning is anti-social.*	7.6%	14%	19.4%	33.1%	25.8%
14) Face-to-face education is more beneficial than distance education.	1.7%	5%	13.2%	39.3%	40.9%
15) In distance education, the control of the education environment cannot be done in a healthy way.*	4.5%	9.1%	12%	43%	31.4%
16) Distance education is not an alternative to face-to-face education.*	7%	23.8%	27.3%	23.3%	18.6%
17) Distance education cannot be applied in a healthy way in our country.*	3.5%	11.4%	19.2%	35.1%	30.8%
18) Since a technological infrastructure is required to receive distance education, it is difficult to reach the masses who are weak in terms of socioeconomic status.*	2.1%	2.1%	7.4%	33.3%	55.2%
19) The results of distance education applications are not effective.*	5.2%	20%	30.8%	26.9%	17.1%
20) A more effective learning is provided by face-to-face training.	2.3%	5.4%	13%	39.5%	39.9%
21) Face-to-face education is applied at a lower cost than distance education.	7%	19%	41.1%	21.3%	11.6%

*: NEGATİVE QUESTIONS; SD: STRONGLY DISAGREE; NA: NOT AGREE; UN: UNSURE; AG: AGREE; AAG: ABSOLUTELY AGREE

Discussion

Students are one of the groups that are affected from the pandemic the most. Both instructors and students were caught unprepared for this sudden change in their education life. Distance education was implemented in the spring term of 2020 and in the 2020-2021 academic year,

when the reopening time of schools and the course of the epidemic was uncertain. Public high schools have tried to conduct distance education through public television, and private high schools have tried to conduct distance education through their own school systems. It has been seen that remote access is more easily implemented in private high schools and as seen in our study, many students stated that the devices they use in distance education are their own.

Distance education has a different learning environment compared to traditional education, it is more advantageous in terms of affordability and accessibility. In addition, the other advantages are the absence of attendance obligation, the comfortable learning environment, the ability to watch again at any time, and the high motivation of the students since there is no time and place limitation. The disadvantages are; not all courses are suitable for distance education, lack of face-to-face communication in learning environments, adaptation problems of students who have not gained the habit of self-study, communication problems in crowded student groups, and infrastructure problems required for distance education. In the private high schools where our study was conducted, it was seen that the majority of the students use laptops or tablet computers and the most common problem they encounter is internet or connection problems.

Social media use is very common among students. Students who spent an average of three hours on social media before the pandemic started to spend more than five hours after the pandemic. Similarly, while the time spent watching television did not reach an hour before the pandemic, it increased to over an hour after the pandemic. In our study, it was determined that the most used platform for social media by the students was Youtube, and the most used platform for communication was WhatsApp. According to this result, it is thought that the use of WhatsApp for communication purposes will make it easier to reach students.

In our study, students were asked to evaluate distance education with the distance education attitude scale. Accordingly, 58% of the students stated that the distance education model is not an adequate and effective learning model. Distance education attitude scale score did not differ between schools, classes or genders. The average score is around 57, and it has been determined that students' attitudes towards distance education are negative.

Conclusion

The transformation of the COVID-19 disease into a pandemic in the world affected education in all countries where the epidemic was experienced, and distance education was used instead of face-to-face education in order to slow down the epidemic. The time spent by students on social media has increased during the pandemic process, and WhatsApp and Twitter, which are used mostly for communication, have become popular. Today, although students like to use technological devices, they have emphasized that they are not satisfied with the distance education process and prefer face-to-face education. In the light of all these data, it is important to develop and improve distance education, which has been rapidly transitioned due to the sudden start of the process, and to increase student satisfaction.

Acknowledgments

Author Bio

Öykü Çelik is 18 years old. She's a 11th grade student at Samsun Bahcesehir College Science and Technology High School, hoping to study medicine.

Reference List

[1] Agir, F., 2007. Determining the attitudes of primary school teachers working in private and public schools towards distance education. (Master Thesis). Balikesir University Institute of Science and Technology.

[2] Basaran, M., Dogan, E., Karaoglu, E., Sahin, E., 2020. A study on effectiveness of distance education, as a return of Coronavirus (COVID-19) pandemic process. AJER, 5(2), 368-397.

[3] Hodges, C., et al., 2020. The difference between emergency remote teaching and online learning. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-andonline-learning

[4] Nahcivan, L., Çermik, E., 2020. Remote learning during COVID-19 in Hisar School. Open Schools Journal for Open Science, 3(10), doi:https://doi.org/10.12681/osj.24894

[5] UNESCO, 2020. COVID-19 educational disruption and response. https://en.unesco.org/covid19/educationresponse

[6] Zhou, S. J., et al., 2020. Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. European Child & Adolescent Psychiatry, 29(6), 749–758.