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Research Article

Online Distance Learning During Covid-19 Pandemic: An Empirical Analysis Over the Students' Opinions

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ABSTRACT

The COVID-19 Pandemic has changed areas of societal life to a great extent. Educational fronts are one of them as well. Self-isolation has caused the lock down of educational facilities and it led to the rise of online distance learning worldwide. With its pros and cons this method has been used for more than one year. In this regard, the study used a detailed survey to collect the opinions of Turkish higher education students about the e-learning process during the spring term 2020 when the COVID 19 Pandemic began. For this purpose, 750 surveys were conducted over Google Forms with participant of higher education students from Turkey. The results of the research revealed the following findings. The majority of the participants stated that although distance education had some advantages, it was not a substitute for traditional education, and they could not achieve the same efficiency. The main reasons for this conclusion were inadequate infrastructure, internet access problems and unfair competition caused by the lack of computer hardware, especially in the ongoing education throughout the country. Students also stressed the significance of online education and how it helped them to stick to their academic careers as they had no alternative other than following an online education system in the social isolation period of COVID-19 measures.

Keywords: Online Distance Learning, COVID-19, Students Opinions



1. Introduction

On 31st December 2019, 27 cases of pneumonia patients attracted the World's interest to Wuhan City, Hubei Province of People's Republic of China. These patients were the first of identified cases related to a new virus later called COVID-19 by the World Health Organization (Sohrabi et al., 2020:71). The Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic on March 11, 2020 (Cucinotta et al., 2020:158). The virus spread so quickly that all countries around the world had to take quarantine measures immediately in the beginning of 2020. These measures introduced a new order in the social life.

There is no doubt that the COVID-19 pandemic has changed socio-economic life all around the world. To prevent the spread of the virus, countries have taken necessary measures such as closing borders at international level and applying quarantine measures at national level. Ongoing activities of businesses have been shut down. Manufacturing operations of many businesses have been restricted immediately following the commencement of the Pandemic. Workers were sent to their homes. This caused the collapse of global supply chains and a particular type of economic crisis, namely economic disruption occurred. During the first months of the Pandemic many citizens were asked to stay at their homes which would contribute to the elimination of Pandemic positively. Social isolation, social distance and new order concepts were all new to society in the beginning.

Educational fronts were also affected by the Pandemic as well. All educational facilities were shut down immediately with the commencement of the Pandemic measures. Closure of educational facilities brought together the question: Was it the end of the educational year of 2020? Education plays an important role in the socio-economic life, and it consists of billions of students. Just by ending the educational year would not be a solution. The pandemic has affected more than 1.38 billion learners according to the UNESCO's estimations (weforum.org, 2020). This number also includes higher education students as well. While higher education today has several challenges related to technological improvements, the pandemic has brought together the need to deliver education from regular on-site learning to online distance learning.

Up to the outbreak of COVID-19, online learning was thought to be a way of assisting learners who did not have a chance to follow formal learning institutions. However, with the "new normal" educators introduced ways of online distance learning to give their regular face to face courses over internet applications. Many of the lecturers felt it strange to talk in front of the monitor usually seeing none of the students. Many of the lecturers were told to ask students keep their cameras off, since lessons with crowded classes caused excess internet bandwidth usage and/or system shut-downs in the very beginning of the large scale online learning program.

Unaware of the fact whether technological infrastructure would meet the mass demand caused by billions of learners, students had to follow the instructions to continue their education and attempted to learn by the online learning system. Many of them had connection problems in the beginning related to several reasons, such as the lack of infrastructure, no internet membership or lack of information about how to use the new software. The following part of the study presents a literature review on COVID-19 and the online learning experience of both educators and students. This part is followed by a research over higher education students about their experiences of online learning during the COVID-19 Pandemic.

2. Literature Review

Author	Year	Findings
Huang, R.H.; Liu, D.J.; Tlilil, A.; Yang, J.F.; Wang, H.H., et al.	2020	Introduced and tied the concept of flexible learning to COVID-19. The term used in 2010 by Lee and McLoughlin.
Mensah, Elizabeth Armstrong; White, Kim Ramsey; Yankey, Barbara; Brown, Shannon Self	2020	Investigated the effects of COVID-19 and Distance Learning over the students at Georgia State University School of Public Health Students. The authors concluded that students were still motivated to learn and complete their assignments on time.
Aboagye, E; Yawson, J.A; Appiah, K.N.	2020	Investigated problems associated with the transition from conventional learning (face to face) to online learning (e-learning) during COVID-19. Accessibility issues, social issues and lecturer issues were found to be significant in the research part of the study.
Ichsan, I., Z.; Rahmayanti, H., Purvanto, A.; Sigit, D.V.	2020	Tested the use of ILMIZI (identify, limit, make mind map, interpret, analyze, interaction and evaluate) model for e-learning environment during COVID-19. The authors found that participants' score of pro-environmental COVID-19 was low and the ILMIZI model was one form of learning innovation.
Lestiyanawati, R.; Widyantoro, A.	2020	The authors discussed the use of several strategies and challenges faced by teachers conducting e-learning system during COVID-19. Online chat, video conference and combining both were the strategies while teacher's disability in accessing technology, lack of school facilities were the challenges faced by teachers. In addition, student's internet access limitation was stressed.
Abbasi, S.; Ayoob, T.	2020	The study concluded that students did not prefer e-teaching over face-to-face teaching during COVID-19 and improvements required over e-teaching for better learning.
Owusu-Fordjour, C.; Koomson, C.K.; Hanson, D.	2020	The study aimed at assessing the impact of COVID-19 on learning. The study stressed that students were unable to study effectively from houses and it made the online system of learning very ineffective.

Srinivasan, D.K.	2020	The study investigated effectiveness of e-learning during COVID-19 and conducted a research among medical students. Positive opinions about online learning were received both from students and teachers.
Chavarria-Bolanos, D.; Gomez- Fernandez, A.;Dittel-Jimenez, C., Montero-Aguilar, M.,	2020	The authors investigated possibility of e-learning strategies in dentistry. They concluded that e-learning environment should be improved by categorizing the academic courses suitable to e-learning.
Alipio, M.M.	2020	The study put forward several challenges. School officials needed to address the lack of digital skills among students and formulated programs that would capacitate them. From development economics perspective low-income and rural areas dwellers should be supported with respect to financial, operational and internet connectivity issues.
Almaiah, M.A; Al-Kahasawneh, A.; Althunibat, A.	2020	The study included an in-depth interview with 30 students and 31 experts and investigated challenges and factors of e-learning usage during the COVID-19. Technological, e-learning system quality, cultural aspects, selfefficacy and trust factors were found to be effective. Challenges of the e-learning were found to be change management issues, e-learning system technical and financial support issues.
Chiu-Lan Chang; Ming Fang	2020	Authors stressed that although most instructors try to prepare the contents of instructions well, they possessed low skills in sophisticated computer and internet related tasks and preferred traditional methods of course instructions. However, online instructions were still important and help students to keep learning without limitation.
Baig, Qaiser Ali; Zaidi, Syed Jaffar Abbas; Alam, Beenish Fatima	2019	The authors investigated e-learning resources and its application in dentistry. 21 participants of the study led authors conclude that smart phones were limited to communication and majority of students utilized online resources like e-books.

Radha, R.; Mahalakshmi, K.;	2020	The study analyzed e-learning
Kumar, S.; Saravanakumar, A.R.		process among students who were
		familiar with web-based technology
		and aimed at finding solutions
		to improve the self-study skills
		of students. %82 of participants
		gave positive opinion about the
		improvement of self-study skills
		during e-learning.

3. Research

Due to the COVID-19 Pandemic, online distance education has become an important part of educational life. As in many countries of the world Turkey started to implement online distance education practice to reduce the impact and spread of the outbreak. The effects of the online distance education practice over the students have become an important issue discussed in education (Yamamoto and Altun, 2020:25).

In this study, online distance education practice for undergraduate students studying in higher education institutions was examined. It is important to identify problems and offer solutions in order to increase quality and efficiency in the online distance education process, which seems to be an inevitable end if the COVID-19 Pandemic continues worldwide. Increasing the adaptation of scholars and students to online distance education practices and improving infrastructure systems will enable processes to function in a better way. The study is important because it creates a data set that will support decision makers planning the online distance education practice.

This research part of the study sought answers to the following questions:

- What is the perception level of undergraduate students about the preparation process for online distance education?
- What are the perspectives of undergraduate students on the online distance education process?
- What are the perspectives of undergraduate students on the educational process?
- To what extent are undergraduate students affected by the online distance education process?
- To what extent are undergraduate students affected by the corona virus process?

3.1. Method

In the study, quantitative and qualitative research methods were used together as a mixed research method. In order to make quantitative and qualitative measurements in the study, the "Views on Online distance education in the COVID 19 Process" questionnaire form consisting of six parts was created and delivered to the participants on the Google form. The first part of the form consisted of 10 questions for demographic features, the second part of the form 4 questions for metaphorical perception, 49 Likert scale statements for quantitative measurement of the third, fourth and fifth part of the form, and 7 questions for qualitative measurement in the last part of the form, a total of 70 items were used.

In the first part of the study, a personal information form with 10 questions was used to determine the demographic characteristics of the participants. In the first part, information on gender, age, university, faculty department and class, place of residence, family income status of the participants were determined. In the quantitative research part that constituted the third, fourth and fifth parts of the study, 18 statements aimed at determining the preparation for online distan-

ce education in the COVID-19 Pandemic, 18 statements aimed at determining the participants' views on online distance education, 13 statements aimed at assessing the opinions of the participants about education, 3 parts with 49 items in total questionnaire form was used. While creating the questionnaire form that constituted the quantitative research part of the study, "Views of Online distance education Students on Online distance education" scale developed by Yıldırım, Yıldırım, Çelik and Karaman (2014) was used. In the quantitative research part of the study, a 5-Likert type scale was used. Scale 1 (Strongly Disagree / Never Disagree / Never), 2 (Disagree / Rarely Agree / Rarely), 3 (Undecided / Sometimes Agree / Occasionally), 4 (Agree / Usually Agree / Often, 5 (Strongly Agree / Every Time is scored as Agree / Always and Every Day).

3.2. Limitation, Reliability and Validity of the Research

Limitations of the study was as follows.

- It should not be forgotten that the Online distance education practice, which is the subject of the study, is a subjective situation as it may differ according to the perceptions of the participants.
- The field study of the research was conducted over the internet due to financial and time constraints.

The "Opinions on Online distance education in the COVID-19 Process" likert scale questionnaire form, which constituted the quantitative part of the study, was analyzed by using the SPSS 25.0 program to test its Cronbach's Alpha reliability values, for the dimensions of 'preparation for online distance education', 'opinions about online distance education', 'opinions about education' and for general reliability.

Table 1: Reliability Test Results

Survey	Dimension	N	Cronbach's Alfa Value	
	Preparation for distance education	18	0,961	
Perceptions about Online Learning During	Views about online distance education	18	0,888	
COVID-19	Views about education	13	0,910	
	General Reliability	49	0,944	

As a result of the reliability analysis, the preparation process for online distance education sub-dimension was excellent with Cronbach's Alpha Value of 0.961, opinions towards online distance education sub-dimension was good with 0.888 score and opinions about education were obtained at a perfect level with Cronbach's Alpha Value of 0.910. The general reliability level of the survey was excellent with 0.944 Cronbach's Alpha Value. Reliability was obtained when Cronbach's Alpha Value occurred above 0.5 significance level (Kılıç, 2016: 48). The results of the Cronbach's Alpha reliability test applied were given in detail in Table-1.

For the validity of the questionnaire used in quantitative research in the study, exploratory factor analysis was applied for 49 Likert Scale statements. Kaiser Meyer Olkin Measure of Sampling Adequacy (KMO) value was obtained and then, Barttlet Sphericity Test was applied. The results were examined. The KMO value of the questionnaire was obtained as 0.941. As a result of the Bartlett test, the p value was obtained at a significance level of "<0.001". The suitability of survey statements for factor analysis was verified by Kaiser Meyer Olkin test and Bartlett's test. The KMO value should be 0.50 and above, and Bartlett's Test should be at the p <0.001 level (Field, 2000).

Table 2: KMO ve Bartlett's Test Results

Survey	N	Test	Value
Perceptions about Online Learning During	49	KMO	0,941
COVID-19		Sig	0,000

The results proved that the data were suitable for factor analysis. As a result of the factor analysis of the questionnaire, a variable of eight factors emerged, these factors took variable values between 1,087 and 15,106. Eight-factor questionnaire explained 71,313% of the total variance. The fact that the total variance of the factors was 0.50 and above constituted validity and the variables gained significance (Büyüköztürk, 2002: 472-473).

The research part of the study consisted of two qualitative research namely the second and the sixth sections. In the second part, which constituted the qualitative part of the research, there were 4 open-ended questions for metaphor analysis. In metaphor analysis, the purpose was to define a phenomenon within the question patterns regarding the research subject and to evaluate the emerging phenomenon by creating a word collection (Schmitt, 2005: 360). The sample and question dimensions for the metaphor analysis of the study were appropriate and valid.

There were 7 questions in the sixth section, which formed the second qualitative part of the research. In the qualitative section, in the purposeful sampling method, the group suitable for the criteria and characteristics of the research was selected over the proposed variables suitable for the study purpose. In the purposeful sampling method, the sampling units were classified for specific reasons for research purposes (Uyangör and Dikkartın, 2009: 184). While selecting undergraduate students as criteria in the study, 736 undergraduate students from 35 different universities were reached in order to create the sample. In the research part, the sample size for qualitative research was enough and the questions were suitable for the research purposes.

3.3. Population and Sample of the Research

The population of the research consisted of undergraduate students enrolled in higher education institutions. According to the data of the Higher Education Institution, the number of students enrolled in higher education in 2020 was 4,420,699 (https://istatistik.yok.gov.tr/, Access Date: 15.07.2020). The questionnaire forms prepared to collect the data of the study were applied to undergraduate students via the internet by random selection method. Turkish higher education students' opinions about e-learning process during the spring term 2020 were collected between June 1st to September 31st, 2020.

The sample size of the research consisted of 736 undergraduate students. In the study conducted over 736 samples for 4,420,699 people, which made up the population of the study, it was estimated that a reliability level of 0.95 and an acceptable deviation of 3.61% (+/-) were found to be sufficient for evaluation.

3.4. Analysis and Findings of the Research Data

The questionnaires applied to the sample mass in the study were then evaluated in the SPSS (Statistical Packages for Social Sciences) 25.0 data analysis program.

3.4.1. Demographic Characteristics of the Participants

When the demographic structure of the participants was examined; 268 of the undergraduate students participating in the survey were male and 468, 63,6%, were female. The age range of the

participants was between the ages of 21-23. 140 students comprising 19% of the participants were 21 years old, 169 students comprising 23% of the participants were 22 years old, and 145 of the students making up 19.7% of the sample was 23 years old. 61.7% of the participants were between the ages of 21 and 23. The monthly household income of the participants were generally of an income level of 5000 TL and below. 46.9% of the participants had an income level of 0-2499 TL, and 33.6% had an income level of 2500-4999 TL. 80.5% of the participants had an income of 5000TL or less. The demographic characteristics of the participants were given in detail in Table-3.

Table 3: Demographic Characteristics of the Participants

Demographic Structur	·e	Frequency	Rate (%)
Gender	Male	268	36,4
	Female	468	63,6
Age	18	7	1,0
	19	21	2,9
	20	67	9,1
	21	140	19,0
	22	169	23,0
	23	145	19,7
	24	62	8,4
	25	56	7,6
	26	19	2,5
	27 and over	50	6,79
Household Income	0-2499	345	46,9
Level (TL)	2500-4999	247	33,6
	5000-7499	108	14,7
	7500 and upper	36	4,8

The educational status of the participants was given in detail in Table 4. According to Table 4 data, 32.06% of the participants were at Fırat University, 15.76% at Çanakkale 18 Mart University, 11.68% at Sakarya University, 11% at Süleyman Demirel University, 29.5% at 31 different universities. When the faculty distribution of the participants was examined, it was determined that most of them enrolled in faculties related to social sciences. 57.06% of the participants were students of Faculty of Economics and Administrative Sciences, 7.06% of them were enrolled in the Faculty of Political Sciences, 2.03% of business administration, 1.63% of Faculty of Humanities and Social Sciences. When the programs studied by the participants were examined, 34.7% of the students were in the Department of Labor Economics and Industrial Relations, 7.47% were in Business Administration and 7.06% were in Economics. 52.05% of the participants were fourth grade students. When the educational status of the participants was evaluated in general, it was determined that the majority of them were senior students studying in the field of social sciences.

Table 5 demonstrated the basic features of the participants' distance education experience. While 55.3% of the participants lived in city centers during the distance education process, 28% lived in suburbs and 16.7% lived in small towns and villages. While 66% of the participants had their own computer, 66.8% of them did not involve in any distance education process before. This situation implied that the majority of the participants had the necessary technical infrastructure, but they did not have experience in terms of the training process for distance education.

Table 4: Enrollment Status of Participant Students

Enrollment		Frequency	Rate (%)
University	Fırat U.	203	32,06
	Sakarya U.	86	11,68
	Çanakkale Onsekiz Mart U.	116	15,76
	Recep Tayyip Erdoğan U.	59	8,01
	Süleyman Demirel U.	81	11,00
	Van Yüzüncü Yıl U.	31	4,21
	Bandırma Onyedi Eylül U.	14	1,90
	İzmir Demokrasi U.	13	1,76
	Kafkas U.	12	1,63
	On Dokuz Mayıs U.	21	2,85
	Dumlupınar U.	17	2,30
	Kocaeli U.	10	1,35
	Other Universities ¹	73	9,91
Faculty	Economics and Administrative	420	57,06
	Business Administration	15	2.03
	Humanities	12	1,63
	Engineering	50	6,79
	Forestry	6	0,81
	Medical Sciences	37	5,02
	Political Sciences	52	7,06
	Sports	28	3,80
	Science and Literature	29	3,94
	Education	26	3,53
	Law	15	2,03
	Other ²	46	6,25
Department/Programme	Labor Economics and Ind. R.	256	34,70
	Business	55	7,47
	Economics	52	7,06
	Econometrics	27	3,66
	Law	15	2,03
	Chemistry	17	2,30
	Finance	22	2,98
	Sports Management	38	5,16
	Metallurgy	28	3,80
	Other	226	30,70
Grade	1	74	10,05
	2	111	15,08
	3	168	22,82
	4	383	52,05

¹ Universities with less than ten participants were evaluated together. In this context, there were 23 universities. These universities were Adnan Menderes University, Atatürk University, Anadolu University, Ankara University, Bilecik Şeyh Edebali University, Bülent Ecevit University, Dicle University, Düzce University, Ege University, Esenyurt University, FSM U., İnönü U., Medipol U., İstanbul University., K. Sütçü İmam U., Karabük U., Namık Kemal U., Okan U., Selçuk U., Trakya U., Pamukkale U., Uludağ U., Munzur U.

² Universities with less than five participants were evaluated together. There were 10 faculties in this scope. These faculties were in the form of theology, architecture, medicine, pharmacy, aquaculture, agriculture, natural sciences, veterinary medicine, dentistry and maritime.

Table 5: Basic Characteristics About the Participants' Entry into the Distance Education

Place of Dwelling during the Distance	City Center	407	55,3
Education Process	Suburbs	206	28,0
	Town/Village	123	16,7
Do you have a computer of your own	Yes	486	66
	No	250	34
Have you ever involved in the distance	Yes	244	33,2
education before?	No	492	66,8

3.4.2. Analysis of the Data

The scale used in the study was a questionnaire form consisting of a total of 70 questions including quantitative and qualitative research parts. The 3rd, 4th and 5th parts of the questionnaire form consisted of the likert survey scale in the form of quantitative research method, while the 2nd part consisted of a 4-question metaphor analysis, the 6th part consisted of 7-question open-ended questions. While evaluating the findings of the study, the quantitative section, metaphor section and qualitative section were analyzed under separate titles.

Findings Related to the Quantitative Parts of the Study

In the quantitative part of the research, a Likert scale questionnaire with a total of 49 questions in three parts was used. Participants' preparation for online distance education, views on online distance education and their views on education in the COVID 19 process were measured in this section.

The third part of the study, which measured the readiness of the participants for online distance education in the COVID 19 process, consisted of 18 items. Question form: Scored 1 (Strongly Disagree), 2 (Disagree), 3 (Undecided), 4 (Agree), 5 (Strongly Agree).

According to data in Table 6, the total factor average value of the participants in their preparations for online distance education in the COVID 19 process was 3.65. Participants gave an undecided opinion in their preparations for online distance education. During the online distance education preparation process, the lowest factor average of 2.85 occurred in the proposition that "Other online activities (chatting, surfing on the internet) do not distract me during the online distance education process". Participants stated that online activities can distract them. The highest factor average of the participants during the preparation process for online distance education occurred in the proposition "I am open to new ideas" with 4.09. Participants declared that they are open to new ideas in the online distance education process. Considering the general views of the participants regarding the preparation for online distance education during the COVID 19 process, the general uncertainty caused by the Global Pandemic that occurred in a period when technology affected human life at the highest level around the world affected the participants responses as well. Participants who had not experienced such comprehensive distance online learning in the past and therefore they were affected by the uncertainty.

The Likert questionnaire, which was the fourth part of the study and in which the views of the participants about online distance education in the COVID 19 process, were measured, consisted of 18 items. Question form; Scored 1 (Never Agree), 2 (Rarely Agree), 3 (Sometimes Agree), 4 (Usually Agree), 5 (Always Agree).

Table 6: Preparation Process of Participants for Distance Education During the COVID 19

Descriptive Statistics			
	N	Mean	Std. Deviation
[I am confident in using the basic functions of Microsoft Office programs (MS Word, MS Excel and MS PowerPoint).]	736	3,55	1,222
I trust my knowledge and skill in how to manage online learning software.	736	3,23	1,209
I rely on my ability to use the internet (Google, Yahoo) to gather or learn about online learning.	736	3,85	1,232
I use my own work-schedule.	736	3,59	1,243
I seek help when faced with learning problems.	736	3,77	1,201
I manage my time well.	736	3,34	1,196
I set my learning goals	736	3,68	1,143
I have high expectations regarding my learning performance	736	3,54	1,183
I can direct my own learning process	736	3,67	1,164
In the online training process, other online activities (chatting, surfing the internet) do not distract me.	736	2,85	1,315
I review online learning materials according to my needs.	736	3,63	1,192
I am open to new ideas.	736	4,09	1,174
I have the motivation to learn.	736	3,76	1,214
I learn from my mistakes	736	3,81	1,236
I like to share my ideas with others.	736	3,89	1,236
I am confident in using online tools (such as e-mail, chat, conversation) to communicate effectively with others.	736	3,96	1,262
I am confident in expressing myself (my feelings and humor) by writing.	736	3,88	1,243
I am confident in asking questions in online discussions.	736	3,66	1,255
Valid N (listwise) and Total Mean	736	3,65	

According to Table 7 data, the total factor average value of the participants' views on online distance education in the COVID 19 process was 3.14. The factor average on which the participants expressed their opinions was "I share what I have just learned with others" with 4.01. Participants were open to new ideas in the online distance education process and generally expressed their opinions preferring to share the new information they obtained. The lowest factor average expressed by the participants was the suggestion of "I leave the tasks given mostly" with 1.74. While the participants stated that they never participated in this situation, they stated that they mostly completed the assigned tasks. Participants rarely agreed with the statements "Online distance education is suitable for me due to the intensity of my personal work, online distance education is suitable for my lifestyle, online distance education is a suitable alternative for the trainings I need, online distance education enables me to receive education without losing time". The general opinion of the participants was that it was a regulation that does not meet the needs and demands of the participants. While the participants expressed the opinion that online distance education was less effective than traditional education, they also stated that online distance education was not a good educational opportunity. When evaluated in general, the participants put forward the view that they found online distance education inadequate and did not provide the opportunities that traditional education provided.

The Likert questionnaire, which constituted the fifth part of the study and measured the views of the participants on education in the COVID 19 process, consisted of 13 items. The questionnaire was scored as 1 (Never), 2 (Rarely), 3 (Occasionally), 4 (Often), 5 (Always and Every Day).

Table 7: Participants' Views on Online distance education in the COVID 19 process

Descriptive Statistics			
	N	Mean	Std. Deviation
Online distance education is suitable for me due to the intensity of my personal work	736	2,61	1,414
Online distance education suits my lifestyle	736	2,54	1,514
Online distance education is a suitable alternative for the trainings I need.	736	2,60	1,486
Online distance education enables me to receive education without wasting time.	736	2,77	1,502
I need the flexibility to attend classes whenever and wherever I want	736	3,06	1,490
Going to college campus to study is difficult for me	736	2,28	1,501
Distance education practices make the student more active in terms of teaching practices	736	2,25	1,438
Online distance education offers a good learning opportunity for people	736	2,40	1,476
Online distance education enables students to learn at their own pace	736	2,70	1,488
Online distance education ensures permanent learning	736	2,26	1,398
Online distance education is more effective than traditional education	736	2,03	1,367
Face-to-face interaction is necessary for my education to be best	736	3,83	1,431
Ideas are expressed instantly and more clearly in traditional education than in online distance education.	736	3,73	1,491
Compared to online distance education, a more effective learning is provided with traditional education.	736	3,72	1,506
I need face-to-face communication to learn.	736	3,68	1,449
I am a person who has made a habit of postponing tasks.	736	2,46	1,416
I often leave the tasks unfinished	736	1,74	1,155
I wait until the last moment to do my homework	736	2,31	1,398
I enjoy intellectual struggles	736	3,64	1,074
I share what I just learned with others	736	4,01	,924
Valid N (listwise) and Total Mean	736	3.14	

Table 8: Participants' Views on Education in the COVID 19 process

Descriptive Statistics			
	N	Mean	Std. Deviation
I like to analyze issues and problems in depth	736	3,90	,966
Reading is a regular activity I do	736	3,46	1,132
I'm self motivated	736	3,74	1,124
I browse libraries and bookstores for interesting books and magazines	736	3,42	1,224
I make interesting contributions to discussions at school or around me.	736	3,39	1,123
Critical thinking is one of the activities I do	736	3,67	1,092
I read for fun or entertainment	736	3,84	1,051
I am interested in many different fields.	736	4,00	1,049
I follow different interests.	736	3,95	1,054
I like to learn something new	736	4,33	,882
I read too many books, magazines etc. that are not related to school or lessons.	736	3,61	1,196
Valid N (listwise) and Total Mean	736	3,75	

According to Table 8 data, the total factor average value of the participants' views on education in the COVID 19 process was 3.75. The factor average of the participants' opinions was "I like to learn something new" with 4.33. Participants are open to innovative ideas and enjoy learning new information. Participants also expressed their interest in different fields. In the participants' views on education, there were occasional activities of library navigation and reading habits. Participants also occasionally contributed to the discussions in their school and their environment and reported that they were motivated from time to time. When the opinions of the participants on education were evaluated in general, it could be said that they wanted to learn new information and ideas on different topics, but their reading and research habits were limited.

Findings of the Qualitative Part of the Research

The qualitative part of the study consisted of the metaphorical part in the 2nd part and the open-ended question part in the 6th part. The qualitative part of the research was developed by designing a phenomenology pattern. Phenomenology design is an appropriate research method to determine the phenomena that the person is aware of but cannot fully grasp (Yıldırım & Şimşek, 2006).

Metaphorical Part

In the second part, which constituted the metaphorical part of the study, 4 statements were directed to the participants. Two of the statements were to measure the metaphor perceptions of the participants about "Online distance education" and "COVID-19 Pandemic" and the other two were open-ended questions about the online distance education process and the problems they experienced in the COVID-19 Pandemic.

There are two concepts frequently used in metaphor research. Among these concepts, the concept of "like" was created to create the relationship between the subject of the metaphor and its source, and the concept of "because" was created to reveal a logical reason in the definitions of the participants (Saban, 2008). While the analysis of the data obtained in the study was carried out with certain stages, content analysis technique was used in the evaluation of the results. Content analysis is essentially bringing the ideas emerging on a particular subject into an understandable form by matching them with similar aspects (Yıldırım & Simsek, 2006). Before the metaphor questions were directed to the participants, information and sampling about the metaphor was given. For the analysis of metaphors, firstly, the metaphors defined by the participants were listed alphabetically, and the expressions that did not describe the metaphor clearly and whose metaphor description were empty were excluded from evaluation. It was determined that some of the participants did not define metaphors and wrote their general thoughts or did not present a valid reason, and their expressions were excluded from evaluation. The metaphors obtained as a result of the first stage were listed alphabetically and in the second stage, similar metaphors were brought together to form a representation metaphor expression. Similar metaphor groups were created, and the data were evaluated and the validity and reliability phase were initiated. Data were interpreted after validity and reliability.

metaphors took place in this dimension, the expression "Good" was the most frequently expressed metaphor by the participants with a frequency of 23. Again, in the emotional dimension, other frequently used metaphors were expressed as inadequate 21, difficult 21, easy 21 and unproductive 20 times.

Table 9: Metaphors Based on Participants' Views

Category	Metaphor	Frequency	F	%
	Open University	5		,
	Experiment	1	_	21,87
A _4::4	Entertainment	3	7	
Activity	Film	3		
	Computer Game	1		
	Formal Education	10		
	Reading a Book	1		
	Shopping Mall	4		
	Cafe	4	_	
C4'-1	Home Office	5	7	21,87
Spatial	Home	8		
	Prison	4		
	Wall	1		
	Baby Care Center	1		
	Plant	1		
	Cactus	1		18,75
Objective	Broccoli	1	6	
	Apple Worm	1		
	Candy	2		
	Cake	2		
	Torture	6		
	Rest	1		
	Sufficient	5		
	Insufficient	21		
Emotional	Difficult	21		
	Easy	21	12	27.51
	Nightmare	8		37,51
	Sleep	1		
	Good	23		
	Waste of Time	1		
	Productive	7		
	Unproductive	20		
Total	^		32	100

When the reasons arising in the metaphors that the participants discussed in the event dimension were examined, the participants' statements were as follows.

- "Online distance education is like open university for me, because exams are online-education is distance";
- "Online distance education is like a movie for me because you can watch it again you cannot communicate with the other party – other party just acts – you can stop and watch it again";

• "Distance education is like formal education in my opinion, because there is no difference between them - it is processed efficiently - education is in every area of life - it is properly processed" stands out. Participants consider online distance education as a dimension of activity and perceive it as a basic activity in their lives.

When the reasons arising in the metaphors that the participants discussed in the spatial dimension were examined, the expressions of the participants were as follows;

- "Online distance education is like a shopping center for me because it is a place where I get what I want whenever I want when I need information I can go and buy it whenever I want-you can buy a course you don't understand";
- "Online distance education is like a cafe for me, because you can spend time as you want, work, drink, chat";
- "Online distance education is like home for me because it is comfortable, we can listen to the lesson as we want, we can move freely";
- "Online distance education is like a home office in my opinion, because there is time flexibility, it is comfortable, we are like company employees, it is flexible" stands out. Participants think that it provides flexibility in terms of time while considering online distance education as spatial comfort and convenience.

When the reasons arising in the metaphors of objective parts are examined, the statements of the participants were as follows;

- "Distance education is like an apple worm to me, because if my science is an apple, the worm is a student, whoever works harder earns it."
- "Distance education is like candy for me because we can do stress-free education."
- "Online distance education is like a cake for me, because class environments give happiness" stands out. While the participants stated that while studying online distance education objectively, the teaching and working environment gave the student comfort and happiness, they thought that the success of online distance education was directly proportional to the student's desire and determination.

When the reasons arising in the metaphors that the participants dealt with in the emotional dimension were examined, participants' expressions were as follows;

- "Distance education seems good for me, because we have a chance to continue our education and our school manages the process well Corona virus leaves no alternative I can follow the lessons quickly homework makes it easier for us to learn";
- "Distance education seems to me inefficient because we cannot adapt it does not replace the classroom environment - technical facilities are insufficient - times are insufficient - teachers and students are inexperienced - communication is very weak"
- "Distance education seems easy for me, because exams are simple we can watch it again the course is easy to follow the process is faster we spend more time for ourselves no classroom stress"
- "Distance education seems to be difficult for me, because there is no technical means the teachers are insufficient the subjects cannot be understood I do not have a computer I have no internet in the village I have no experience I cannot do lessons on the computer"
- "Online distance education seems insufficient in my opinion, because there is no technical means no computer it does not replace the classroom environment not everyone is in the same conditions communication is poor no internet boring teachers do not care

While the participants dealt with online distance education emotionally, two opinions, positive and negative, came to the fore. Participants with a positive approach stated that online distance education was good because it created a stress-free and flexible environment, it was a method that had no alternative during the coronavirus epidemic, and that success would result from the success of the student. The participants who took a negative approach stated that the necessary participation could not be achieved as a result of the lack of infrastructure, technical and equipment for distance education, and that it was not as effective as formal education and explained that it was the first time teachers and students encountered.

Table 10: Metaphors Based on the Views of Participants

Category	Metaphor	Frequency	F	%
Restrictive	Ship	3		
	Open Prison	2		
	Military Service	1		
	Prison	2		
	Shock	1	10	20,83
	Home Imprisonment	5		
	Imprisonment	34		
	Zoo	2		
	Army	1		
	Space Station	1		
Punitive	Hell	3		
	Punishment	3		
	Despairment	4		
	Suffering	3		
	Enemy	4		
	Persecution	3		
	Disaster	3		
	Agony	4		
	Torture	4		
	Nightmare	7	10	20.50
	Black Cat	2	19	39,58
	Disaster	2		
	Cold War	3		
	Creature	2		
	Death	3		
	Bad	30		
	Octopus	1		
	Fever	1		
	Oppressive	1		

Table 10: Continue

Category	Metaphor	Frequency	F	%
Instructive	Wisdom	2		
	Gaining consciousness	1		
	Mole in the Steppe	1		
	Educational	3		
	Course	2		
	Good	13		
	Film	8	13	27,08
	Seat Belt	1		
	Crisis	1		
	Cruise Ship with no Destination	1		
	Exam	6		
	Difficult	5		
	Learning opportunity	2		
Recreational	Purification	1		
	Meditational	Meditational 1		
	Sea	1	6	12,51
	Vacation	4		
	Loneliness	6		
	Rest	3		
Total			48	100

When the reasons arising in the metaphors that the participants dealt with in a restrictive dimension were examined, the statements of the participants were as follows;

- "The coronavirus process is like a prison for me, because social life has disappeared I haven't been able to leave the house for months I can't walk life is so boring at home we don't have old life you're not free"
- "The corona virus process is like a zoo in my opinion, because we have been imprisoned against our will our freedom is restricted like the animals there"
- "The coronavirus process is like military service to me because you cannot do what you want your freedom is limited you have to follow someone else's commands"
- "The corona virus process is like a space base for me because you can see outside but you cannot get out"
- "The corona virus process is like a prison in my opinion, because four walls around you change-free change-everything is limited" stands out.

Participants thought that the corona virus process restricted their freedom, they could not do what they wanted to, they were trapped in certain places, and this situation restricted their lives.

When the reasons arising in the metaphors that the participants dealt with in a punitive dimension were examined, the statements of the participants were as follows;

- "The corona virus process is like hell for me, because I'm so bored everything is forbidden the punishment for not obeying the rules is death"
- "The corona virus process is like a punishment for me, because it took me from life there is
 nothing else to do we pay for what we have done in the past it forced us to live outside of
 what we are used to"

- "The coronavirus process seems bad for me, because our life is ruined like the devil there is no possibility I am unemployed I am away from school my life has been ruined I am ruined my life plans have changed"
- "The corona virus process is like a creature for me, because when it finds an opportunity it destroys you it kills people"
- "The coronavirus process is like a nightmare for me, because I am constantly in fear death is with you every moment everything is forbidden life has changed"
- "The corona virus process is like a black cat in my opinion, because it interferes with everything you love and enjoy"

Participants thought that the corona virus process led people to impossibility, despair and poverty, their lifestyles changed, and it became a great punishment for them.

When the reasons arising in the metaphors that the participants discussed in the instructional dimension were examined, the statements of the participants were as follows;

- "The coronavirus process is like gaining wisdom in my opinion, because it has taught humanity a great lesson we need to think about what we have done,"
- "The corona virus process is like a seat belt in my opinion, because only measures save lives"
- "The coronavirus process seems good for me, because I focused on the lessons-under control-taught us to be clean-we returned to our humanity-taught great lessons-we understood the value of life"
- "The coronavirus process is like education for me, because we learned great lessons the value of everyday things has been revealed the meaning of life has increased we are more familiar with each other".
- "The coronavirus process is like learning for me, because we realized what we had to do we discovered new things"

The participants stated that the coronavirus process behaved as a teacher and that perceptions and values increased in different subjects and stated that we should redesign our lifestyle by taking lessons from this process.

When the reasons arising in the metaphors that the participants discussed in the recreational dimension were examined, the expressions of the participants were as follows;

- "The coronavirus process is like purification in my opinion, because we are back to our core
 we are aware of the facts"
- "The coronavirus process is like meditation for me because we got to know ourselves again we have had time to return to our core"
- "The corona virus process is like a holiday for me because I could rest we took a break from work I discovered myself I found peace".

Participants stated that during the corona virus process, people could take a break from their intense life tempo, take time for themselves, rediscover themselves and their environment and spend time to rest.

In the second part of the study, the metaphorical research part also consisted of 2 open-ended questions which were directed to the participants. These were the main problems related to online distance education and then the problems about COVID-19 experience were investigated. Participants were first directed to the proposition "What are the biggest problems you have experienced in the online distance education process". 696 of 736 participants who participated in the study answered the question, and three main problem categories were determined in the analysis made to the answers given.

Table 11: Analysis of the Statement "What are the Biggest Problems You Encounter During the Online distance education"

Category	Problem	Frequency
Physical Problems	Internet Connection	164
	Computer or Hardware Insufficiency	72
	Online Learning Infrastructure Insufficiency	58
Emotional Problems	Focusing	23
	Adaptation	17
	Unwillingness	22
	Family Pressure	22
Educational Problems	Assignment	54
	Unfair scores	21
	Behaviors of Lecturers	46
	Course Environment	36
	Unrecorded courses	19
	Lack of Experience	27
	Ungrasping the Lecture	29
No-Problems	No-problems	83

11.92% of the participants who answered the survey questions stated that they did not have any problems in the distance education process and stated that the process progressed at a sufficient level within the possibilities. The problems experienced by the participants in the online distance education process were collected under three main headings as a result of the analysis of the data. These topics were physical problems, emotional problems and educational problems. The most important problems faced by the participants were physical problems. Participants had difficulties in accessing the internet, not having a computer and the inadequate online distance education infrastructure of their schools were other important problems. The fact that the participants stayed away from social environments, especially during the quarantine processes, revealed the result of adaptation and focus to online distance education, while the unsuitability of the family conditions of some participants to work was another factor. At the root of the educational problems of the participants, the behaviors that emerged as a result of the lack of experience of the teachers and students in the process, excessive homework and inadequate evaluation criteria were important problems.

The participants were directed to the second proposition "What are the biggest problems you have experienced in the coronavirus process". 672 of the 736 participants participating in the study answered the question, and three main problem categories were determined in the analysis made to the answers.

Table 12: Analysis of the Statement 'What are The Biggest Problems You Encountered During the COVID 19"

Category	Problem	Frequency
Psychological Problems	Longing	29
	Distress	51
	Uneasiness	8
	Loneliness	7
	Sleep Disorder	8
	Fear	17
	Change of Habits	5
	Anxiety	21
	Uncertainty	22
	Crisis	5
	Lack of Motivation	13
Social Problems	Related to Family	52
	Destruction of Social Life	26
	Economic	29
Environmental/Physical Problems	Computer	12
	Inability to go Out	125
	Education	36
	Transportation	7
	Internet	15
	Health	12
	Mask	14
No Problems	No Problems	68

10.11% of the participants who answered the questionnaire stated that they did not have any problems with the COVID-19 and stated that the process continued smoothly. The answers given by the participants to the problems experienced in the corona virus process were analyzed in three categories. These categories were psychological problems, social problems, and environmental / physical problems. Participants' distress and anxiety were the biggest problems among psychological problems. Participants problems with their families were the biggest problem in the social dimension. These problems were caused by increased domestic stress and staying together for a long time. Not being able to go out and being restricted under quarantine were the biggest problems in environmental / physical problems dimension.

Qualitative Analysis of Part 6 in the Research

Seven questions were directed to the participants in the 6th part, which constituted the qualitative part of the study. The answers given by the participants were evaluated and interpreted with content analysis. Participants were first asked about the most positive and negative features of distance education as two separate open-ended questions.

Table 13: Analysis of the Propositions 'Most Positive / Negative Features of Distance Education'

What Are The Most Positive Features of Online distance education According to You?	What Are The Most Negative Features of Online distance education According to You?
Number of Participants Answering: 736	Number of Participants Answering: 736
Research Opportunity • Flexibility (in terms of Environment and Time) Accessibility (Entering lectures, listening again) Non-Stop (Continuity of Education) Affordability (Decrease of School Costs)	Lack of Motivation (Excessive comfort) Not Understanding the Lesson Lack of communication (With School, Teachers and Friends) Inefficiency Inefficiency Ineffectiveness Unfair Competition (Exams, Grades) Technical and Infrastructure Insufficiency (Internet, computer, system problems)

Considering the answers given by the participants, the most positive features of distance education were as follows; Distance education encouraged the learner to do research, especially while having more knowledge about the research methodology with the assigned assignments, it created an opportunity to develop new ideas. While online distance education provided advantages to students in terms of accessibility, it created flexibility in lesson environment and lesson time, especially with respect to saving time. The students stayed with their parents during the online distance education and therefore it was more economical compared to formal education with expenses of dormitory, food... etc.

Considering the answers given by the participants, the most negative features of online distance education were as follows; the efficiency in face-to-face education could not be achieved in the beginning because of communication problems. Thus, students had a lack of motivation and had difficulty understanding the courses. Distance education was unfair due to the difficulties experienced in the control of homework and exams, and that resulted in unfair competition. Inability to reach the system at the desired level due to the lack of technical infrastructure was the other most negative feature of online distance education.

The 3rd proposition directed to the participants was to analyze the difference between distance education and face-to-face education. The statement proposed to them was "Do you think that distance online learning method would replace face to face teaching method?" 736 responses given by the participants were evaluated and presented in three separate categories under the titles yes, no and maybe.

Table 14: Do You Think Online Distance Education Would Replace Face to Face Teaching Method?

Response	Argument
No-Absolutely No,	• No Equal Opportunity (Material-Internet Access-Computer)
Will never	School Is Not Just a Lesson (Socializing)
	• Traditional Education is more instructive and understandable (Learning outcomes,
	communication, discipline, knowledge transfer of the teachers)
I do not think	Both have their own advantages
so- Maybe	May be in theoretical lessons
	Maybe if the system and the deficiencies are fixed.
Yes	After all, we learn somehow
	• Provides an advantage to those who know how to use
	Beneficial because it is more economical

79.35% of the participants stated that distancehhT education would not replace traditional education, and they first evaluated this situation in terms of equal opportunity. According to the participants, they stated that students who did not have the necessary technical facilities could not fully participate in distance education and at the same time, the distance education process brought more financial burden. While 3.26% of the participants expressed themselves as maybe and I do not think, they stated that there was not an alternative model in the COVID-19 process. 17.39% of the participants, who stated that distance education could replace traditional education, stated that something was learned in both ways, it was more beneficial for those who knew how to manage the process, and the process was more economical especially for those who studied far from their hometowns. According to this situation, most of the participants stated that the distance education process would not replace traditional education.

The 4th proposition directed to the participants to collect their opinions about solutions for the problems they experienced during the distance education process. 699 participants answered the question. The suggestions of the participants regarding the problems they had experienced in the distance education processes were as follows;

Participants firstly believed that distance education should be more accessible. It demanded support in overcoming the internet, infrastructure and hardware deficiencies. The participants stated that the quality of education should be increased, and the teachers should be more self-sacrificing and willing, and the training should be supported with different materials. Lastly, the participants stated that focus on education in this process solely would not be enough and students should also be supported psychologically and socially.

The 5th, 6th and 7th open-ended questions propositions directed to the participants were aimed at measuring the academic, social and psychological effects of the distance education process. The social, academic and psychological effects of the participants on the COVID-19 were discussed in 3 dimensions.

Table 15: Analysis of the 'Social-Academic-Psychological Impacts of COVID-19' propositions

Dimension	Impact Type	Argument
Social	I am affected.	Good Impacts
		I spent more time with my family
		I became aware of my neighborhood.
		I had a rest/I spared time for myself
		Bad Impacts
		My relationship with my social group broke.
		It was an inefficient period.
		We became asocialized.
	I am not affected.	I did not see a change in my life.
		I did not feel anything different.
Academic	I am affected	Good Impacts
		My ability to do research improved.
		My grades increased
		Bad Impacts
		I felt lack of knowledge
		I could not keep up with the course.
		It was an unproductive period.
		We could not do an applied study.
	I am not affected	I have always been a person of research.
		My studies continued in the same way.

Table 15: Continue

Dimension	Impact Type	Argument
Psychological	I am affected.	Good Impacts
, .		My soul rested.
		I came to know myself.
		I felt more comfortable.
		Bad Impacts
		I am stressed and depressed.
		I felt anxious.
	I am not affected	I did not feel any change.

The social effects of the participants in the corona process were discussed in two sub-dimensions. While the participants, who were positively affected, stated that they could spend more time with their family and spare more time for themselves, they also expressed the disruption of communication and socialization as a problem. In the COVID-19, the participants stated that while improving their research skills academically, they also increased their scores. Participants stated that the process was inefficient in terms of academics, because they could not do applied studies, and their level of knowledge went back. While the participants stated that they were positively affected psychologically since they could rest and spare more time for themselves in the COVID-19 process, they also stated that their stress increased because of death anxiety and the effect of the virus caused depression.

Findings of this study is parallel to the findings of the study conducted by Turkish Higher Education Institution (YÖK) (2021) stressed in a report titled as "Student Survey Report on Efficiency of Education During Pandemic Process" dated February 2021. The report included 1 million 255 thousand students from 207 universities. %74 percent of the participants continued their education in the bachelor's degree. 52% of the students stated negative opinion about online distance education's effects on their academic career. 31% of the students stated positive opinion about online distance education's effects on their academic career. 17% of the students stayed neutral about the effects of online distance education on their academic career.

Another interesting finding of the Higher Education Institution's report was about the education system after the Pandemic. 46% of the respondents stated that education should be face to face in class environment, 29% stated that the education should be in the form of online distance education and 25% stated that the education should be mixed.

4. Conclusion and Discussion

The COVID-19 process is unprecedented as it happens in the highest level of technology in human history and yet it still affects the whole world. The Pandemic has not only created problems in the field of health worldwide, but has also deeply affected social life in social, economic and educational dimensions. In the fight against COVID-19, different regulations have started to be implemented in business life, economy and education with the applications emerging in the field of health. One of these regulations is online distance learning, which has started to be implemented in the field of education. Although distance education was implemented before CO-VID-19 in specific levels of Turkish education systems, to cover the whole country in the Pandemic has been the beginning of a new era in education both content and coverage terms.

The implementation of distance education in the higher education system during the CO-VID-19 process has caused an uncertainty for institutions, teachers and students. Because for the first time such a comprehensive and long-term process has emerged.

As a result of the research, the majority of the participants stated that although online distance education has some advantages, it is not a substitute for traditional education, and they cannot achieve the same efficiency. The main reasons for this situation are inadequate infrastructure, internet access problems and unfair competition caused by the lack of computer hardware, especially in the ongoing education throughout the country. Errors in process management, lack of adaptation of educators to the process, and the social psychological effects of the virus caused distance education to be inefficient according to the participants views.

An important problem affecting the distance education process is the restrictive and prescriptive living conditions peculiar to the COVID-19 period. This process, which affects students negatively socially and psychologically, sometimes challenges them in terms of economic conditions as well.

To discuss these results, one need to keep in mind the crisis situation caused by the Pandemic, sociological and psychological aspects of this new order. Crisis requires direct and immediate action against an unexpected event such as in the case of the Pandemic. Turkish authorities directed all required resources to online distance learning infrastructure to keep education process in line with the objectives. Society needed time to adapt itself to the new order. During this process some households had significant problems such as losing their income after the economic disruption. From sociological point of view employment is one of the means of establishing societal peace. In this process some households lost their income due to the shutdown of businesses and this may cause children of these households to suffer from economic burden as well. Economically insecure, households may consider education in the second row during the Pandemic. Finally, students psychological wellbeing should be considered to evaluate the results of the research. It is quite normal for a student who is apart from his friends to state that traditional face to face education is better than online distance learning. People in their young age are at the most active stage in their lives. In these ages social life bears importance for them.

Future studies may focus on two subjects based on the results of this study. First, the study put forward those students that have some negative thoughts about the online distance education system arising from the infrastructure. Therefore, studies that argue about the ways of improving the online education platforms can be performed in a multi-disciplinary respect. Secondly, results of the study demonstrate that student's psychological conditions are not good, due to long days of staying at home and away from their school friends. Studies towards improving and motivating students can be performed as well.

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References

- Abbasi, S., Ayoob, T., Malik, A., & Memon, S. I. (2020). Perceptions of students regarding e-learning during Covid-19 at a private medical college. *Pak J Med Sci.* May 2020, *36* (No. Covid 19-4), 57–61.
- Aboagye, E., Yawson, J. A., & Appiah, K. N. (2020). Covid-19 and e-learning: The challenges of students in tertiary institutions, *Social Education Research*, 1(2), 109–115.
- Alipio, M. (2020). Education during Covid-19 era: Are learnens in a less-economically developed country ready for e-learning?, ZBW- Leibniz Information Centre for Economics, Kiel, Hamburg, 1–16.
- Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the e-learning system usage during Covid-19 pandemic, *Education and Information Technologies*, Springer Science and Business Media, 1–20.
- Baig, Qaiser A., Zaidi, S. J. A., & Alam, B. F. (2019). Perceptions of dental faculty and students of e-learning and its application in a public sector dental college in Karachi, Pakistan, *Journal of Pak Med Assoc*, JPMA, 69(09), 1319–1324.
- Chavarria-Bolanos, D., Gomez-Fernandez, A., Dittel-Jimenez, C. & Montero-Aguilar, M. (2020). E-learning in dental schools in the times of Covid-19: A review and analysis of an educational resource in times of the Covid-19 pandemic, *International Journal of Dental Sciences*, Odovtos, 208–224.
- Chiu-Lan, C., & Ming, F. (2020). Journal of physics.: Conference Series 1574, 012166, pp. 1-6.
- Cucinotta, D., & Vanelli, M. (2020). WHO declares Covid-19 a pandemic, Acta Biomed 2020, 91(1), 157-160.
- Huang, R.H., Liu, D.J., Tlili, A., Yang, J.F., & Wang, H.H. (2020). Handbook on facilitating flexible learning during educational disruption: The chinese experience in maintaining undisrupted learning in Covid-19 outbreak. *Beijing: Smart Learning Institute of Beijing Normal University*, Beijing, Chine
- Ichsan, İ. Z., Rahmanyati, H., Purwanto, A., Sigit, D. V., & Rahman M. (2020). Peb-Covid-19: Analysis of students behavior and Ilmızı model in environmental learning, *Jurnal Igra*, 5(1), 1–11.
- Lestiyanawati, R., & Widyantoro, A. (2020). Strategies and problems faced by Indonesian Teachers in conducting e-learning system during Covid-19, *Cllinet Journal (Journal of Culture, Literature, Linguistics and English Teaching)*, 2(1), 71–82.
- Mensah, E. A., White, K. R., Yankey, B., & Self Brown, E. (2020). Covid-19 and distance learning: Effects on georgia state university school of public health students, *Frontiers in Public Health*, 1–10.
- Owusu-Forjour, C., Koomson, C.K., & Hanson, D. (2020). The impact of Covid-19 on learning the perspective of the ghanaian student, *European Journal of Education Studies*, 7(3), 88–101.
- Radha, R., Mahalakshmi, K., Kumar, S., & Saravanakumar, R. (2020), E-learning during lockdown of Covid-19 pandemic: A global perspective, *International Journal of Control and Automation*, 13(4), 1088–1099.
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., Iosifidis, C., &Agha, R. (2020). World health organization declares global emergency: A review of the 2019 novel coronavirus (Covid-19), *International Journal of Surgery*, (76), 71–76.
- Srinivasan, D. K. (2020). Medical student's perceptions and an anatomy teacher's personal experience using an e-learning platform for tutorials during the Covid-19 crisis, Letter to the Editor, *Anatomical Sciences Education, American Association of Anatomy*, (13), 315–316.
- Turkish Higher Education Institution (YÖK) (2021). Pandemi sürecinde online eğitimin verimliliğine ilişkin öğrenci anket raporu, "Yok Anket Raporu.pdf (ozal.edu.tr)", Access Date: July 14, 2021.
- www.weforum.org, "The Covid-19 pandemic has changed education forever. this is how, https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning, Access Date: July 7th, 2020.
- Yamamoto, G. & Telli A., D. (2020). Coronavirüs ve çevrimiçi (Online) eğitimin önlenemeyen yükselişi, Üniversite Araştırmaları Dergisi, 3(1), 25–34.
- Yıldırım, S., Yıldırım, G., Çelik, E., & Karaman, S. (2014). Uzaktan eğitim öğrencilerinin uzaktan eğitime yönelik görüşleri: Bir ölçek geliştirme çalışması, Eğitim ve Öğretim Araştırmaları Dergisi Journal of Research in Education and Teaching, 3(3), 365–370.
- Turkish Higher Education Institution, (YÖK) (2021). https://www.yok.gov.tr/HaberBelgeleri/Haber%20 %c4%b0%c3%a7erisindeki%20Belgeler/Dosyalar/2021/ogrenci-anket-sonuclari.pdf, Access Date: 12.05.2021