JSSER
www.jsser.org

Journal of Social Studies Education Research

Sosyal Bilgiler Eğitimi Araştırmaları Dergisi

2022:13 (2), 24-54

Public administration undergraduate education during the COVID-19

Ferruh Tuzcuoğlu[1] & Elvettin Akman[2] & Çiğdem Akman[3] & Duygu Aksu[4]

Abstract

In this study, the impact of the COVID-19 pandemic on public administration education was analyzed through undergraduate students. The aim of the study is to determine the possible effects of coronavirus on digital education by conducting a quantitative analysis through undergraduate students of the departments of political science and public administration, and to evaluate the findings and make suggestions and recommendations. The research covers undergraduate students of Süleyman Demirel University, Department of Political Science and Public Administration. Within the scope of the aim, twenty-one questions were asked to undergraduate students by applying the questionnaire technique. 734 undergraduate students participated in the survey and the questionnaire was prepared digitally over Google Forms. The survey data were analyzed with the MAXQDA 2020 Analytics Pro program. The findings were evaluated by visualizing them with the help of tables, figures and graphics.

Keywords: *Coronavirus, COVID-19, Public Administration, Education, Digital Education, Turkey.*

Introduction

In the last days of 2019, COVID-19 virus was found in Wuhan, China, and with a rapid spread within three months, it was declared as a COVID-19 pandemic by the World Health Organization on March 11, 2020 (Report, 2020). As of March 12, 2020, COVID-19 has spread to the world and has become a deadly and rapidly spreading virus (McAuley et al., 2020). Its rapid impact on the world and its announcement as a pandemic caused a global crisis to arise. Sectoral COVID-19 action plans were prepared for a comprehensive response to the crisis in important areas such as

[1] *Prof., Sakarya University, Faculty of Political Sciences, Department of Political Sciences and Public Administration, tuzcuoglu@sakarya.edu.tr*

[2] *Assoc. Prof., Süleyman Demirel University, Faculty of Economics and Administrative Sciences, Department of Political Sciences and Public Administration, elvettinakman@sdu.edu.tr*

[3] *Assoc. Prof., Süleyman Demirel University, Faculty of Economics and Administrative Sciences, Department of Political Sciences and Public Administration, cigdemakman@sdu.edu.tr*

[4] *PhD student., Süleyman Demirel University, Graduate School of Social Sciences, Department of Political Sciences and Public Administration, duygaksu@gmail.com*

education, especially in the field of health, which is a key area in combating COVID-19 (Griffin et al., 2020).

In Turkey, the first cases to be seen in the COVID-19 outbreak took place on March 11, 2020. The first death due to COVID-19 occurred six days after the first case was announced and the number of cases continued to increase exponentially (Memikoğlu & Genç, 2020). The first case to be seen in Turkey and the increasing number of cases have brought in restrictions in health, education, economics and many other fields and new concepts have been used. Some of the new concepts that entered daily life with COVID-19 have been the concepts of "Social Distance" and "Isolation" (BBC News, 2020).

With the introduction of new concepts in daily life, it has been implemented in some practices called mandatory and prohibited. Mandatory wearing of masks, partial and full-time curfews, travel restrictions, prohibition of entering and exiting some cities, and the widespread use of disinfectants have been among the practices that determine new life as of April 3, 2020 (Karata, 2020). The wide-ranging implementation decisions taken on April 3, 2020 have affected every area completely (Ince & Evcil, 2020).

The Higher Education Board, which is the authorized institution to combat the COVID-19 epidemic in the field of higher education, first sent the Measures to be Taken About COVID-19 to universities on March 6, 2020. With the announcement of a pandemic by the World Health Organization on March 11, it was decided to suspend education at universities on March 13, 2020. After a two-week break, universities started digital education. Afterwards, various decisions were taken regarding higher education and implementation was introduced.

With the emergence of the COVID-19 epidemic, the termination of formal training at universities and the closure of countries to combat the virus had a serious impact on higher education (Schleicher, 2020). Although the universities, caught unprepared for distance education, take important steps to start education in a short time, the lack of infrastructure of most universities has emerged with significant problems in distance education. In addition, it has been observed that the adaptation process of some of the lecturers to the digital environment takes a long time due to many reasons. Furthermore, it has been revealed by various studies that student participation and effectiveness in distance education is generally low and that the diversity of education such as online conversation and auxiliary applications is not at a sufficient level. However, despite all these, the distance education improvement and development activities of universities continue.

In this study it was aimed to analyze the impact of COVID-19 outbreak, based on the current situation in Turkey at the undergraduate level Department of Political Science and Public Administration, on graduate students. In this context, an online survey was conducted with 734 out of 1058 students studying at Süleyman Demirel University, Faculty of Economics and Administrative Sciences, Department of Political Science and Public Administration and analyzed with the MAXQDA 2020 Analytics Pro program. Thus, it was aimed to determine the effects of the COVID-19 epidemic on digital education and to put forward general recommendations and policies.

Review of Literature

COVID-19 and Higher Education

The COVID-19 outbreak has had a universal impact on students and teachers all over the world, from preschool to universities, by causing the largest education disruption in history. By mid-April 2020, 94% of students, i.e., 1.58 billion students, from preschool education to higher education in 200 countries around the world, were affected by the epidemic (United Nations, 2020). This epidemic, affecting the education of almost all students, urgently created the need for a new policy. Formal education was suspended during the pandemic period to ensure that education can continue without interruption and at the same time, considering the reality of the global epidemic.

As a result of the COVID-19 epidemic, the most important consequence regarding higher education is undoubtedly that education is done through distance education tools. Universities in different countries of the world have opted to extend the distance education infrastructure used in limited areas to all programs or to create a new distance education infrastructure (Çalıkoğlu & Gümüş, 2020). Distance education has started a process that is seen as a necessity rather than a choice in the global epidemic and caught unprepared. Being caught unprepared for the distance education system has also imposed new duties and responsibilities on universities.

New roles and responsibilities have naturally become important both in terms of social and educational responsibility in all decisions taken by universities in the global epidemic (Neupane et al., 2020).

Reference to the COVID-19 Information Note published on March 13, 2020 by the Press and Public Relations Consultancy of the Higher Education Council, education was suspended for three weeks as of March 16, 2020, education, training, academic and social activities were suspended,

and it was decided to receive requests from universities to continue the courses digitally (Council of Higher Education, 2020). Ten days after the announcement of the decisions taken, in his press release, President of the Higher Education Council Saraç said, "This year, we decided to continue the Spring term education process with only distance education, open education and digital education opportunities. In other words, face-to-face education will not be held in the spring term" (Higher Education Council, 2020, p. 1-3). Making the necessary explanations has provided the roadmap needed in education for both students and universities.

Termination of formal education prevented the continuity of education and its continuation without being affected. The new education system needed in this process is a system where students and academicians are united without being together for universities (Lall & Singh, 2020). Education, called distance education or digital education, is a pandemic-era education policy practice that prevents students from coexisting and the spread of the epidemic (Telli Yamamoto & Altun, 2020). This practice ensured the continuity of the training and at the same time, the risks that could be caused by face-to-face training were prevented.

The absence of face-to-face training during the pandemic has led universities to online education and digital platforms. Universities with their own special infrastructure for digital education were caught prepared for this situation, while universities without infrastructure turned towards applications that allow multiple interviews (Erkut, 2020). The digital education system, which is the ideal education for students to continue their education, to increase their stay at home, to adapt to social distance and to minimize face-to-face interaction, is seen as the right decision for education in this process.

Being caught unprepared for digital education and being in the global epidemic negatively affected students, universities and academics in various ways. Online learning has difficulties as well as its ease. The inability of students and academicians to keep up with technology, learning and concentration problems in the online environment, internet and connection problems, the problem of not being able to access the internet at all, lack of technical support and low participation in online classes are among the problems of digital education (Bao, 2020). Bulgaria, Georgia, Ukraine, and Uzbekistan, where many countries such as Turkey, including especially countries have experienced difficulties in the full implementation of distance education. Global challenges are related to online infrastructure, apart from the reasons mentioned above (Arnhold et al., 2020).

Moreover, it is required to mention some of other factors related with these challenges as (Arnhold et al., 2020):

- Weak internet connection and internet speed in many countries,
- High prices for a good internet connection,
- The absence of computers/ laptops /tablets /smartphones that support online education and training,
- Many online tools, platforms and websites crash due to high number of contributors.

The fact that some countries have online difficulties, some countries do not have online facilities and the high costs show how unprepared the world is for digital education in the global epidemic. Since the economic conditions of each country are not the same, the problems experienced in higher education have affected the education and training life of students the most. Questions about when the COVID-19 pandemic will end and when to start formal education are still uncertain. The need for digital education will increase every semester until formal education starts. This process, which was caught unprepared, revealed the current deficiencies and needs. It is necessary to identify the deficiencies required for digital education, to make technical and structural improvement and repair work, and to be digitally prepared for new training periods. As a result of the pandemic, universities will have to rediscover their learning environments and need to rearrange them. (Schleicher, 2020). Universities around the world unexpectedly turned to online teaching and had to enlarge this field.

It is predicted that the transition to online learning and the reinvention of learning environments will continue until a successful vaccine for COVID-19 is released (Burki, 2020). Distance education and online learning enabled education to continue without interruption. At the same time, this situation has revealed the importance of formal education. In the global epidemic, the possible effects of the distance education and online learning process on the departments and areas differ, but to evaluate this situation, the effect of the COVID-19 global epidemic on public administration education has been investigated in the title below.

COVID-19 and Public Administration Training

Universities and students expected answers from the related institutions in response to the questions about how and in what way higher education would continue. The responses of higher education providers have been directed entirely to online teaching and distance learning (Crawford

et al., 2020). Upon the responses, universities quickly entered the digitalization process in education by ending face-to-face education.

Students who were used to providing face-to-face education in classrooms throughout their education life moved away from formal education altogether in the pandemic (Lall & Singh, 2020). The disconnection of the communication provided by formal education, the decrease in the rate of interaction and the presence of students who cannot access digital education have negatively influenced the education life to a great extent. It is predicted that this crisis in higher education and student life will continue throughout the global epidemic. These problems should have been predictable and preventable by educational institutions. The distance education system is a system where students and educators are together without being together, but some students are completely excluded from this system.

When the surveys applied to students studying at higher education level on global epidemic and distance education are examined and the literature is scanned, the number of students who do not have internet access, who do not have an intermediary to participate in online lessons even if they have internet access, and who live in villages are revealed more precisely. In the survey conducted by Avşar and Büyükdoğan (2020) for the students of the Faculty of Economics and Administrative Sciences and the Faculty of Social and Human Sciences, the answer to the question of how often you follow the online courses and the question of which tool you use to participate in online courses, someone else's phone, tablet and the fact that there are students answering their computer shows the effect of the global epidemic on students. This situation is valid for public administration students too.

The research on distance education and accounting education conducted by Kurnaz and Serçemeli (2020, p. 285) concluded that "academicians' viewpoints towards conducting accounting courses through distance education are negative." Regardless of the practical or theoretical distinction of the field of education, it has been observed that the global epidemic negatively affects every part and reduces the learning process compared to formal education.

In addition to being an academic discipline with historical roots, public administration improves itself by updating it in the face of today's developing conditions. Public administration training has become mandatory for a better understanding of the public administration mission. The increase in governance partners, the assignment of various new tasks to the public administration, the globalization process, digitization and the presence of participatory elements increased the need

for public administration training (Cepiku, 2012). Today, what is important in public administration and public administration education is to move away from the classical understanding and respond quickly to innovations according to the needs of the age and to implement it.

What is needed in public administration education is to increase the use of technology and digitalization in the operation of the courses. To ensure and increase the interaction in the classroom in lectures, lecture presentations should be prepared by supporting technology (Akman & Kocaoğlu, 2019). To provide an interactive course flow, the necessary importance should be given to digitalization. In this way, students who are intertwined with technology will increase their interest in the lesson and at the same time, ease of learning will be provided.

The education system, which is generally based on face-to-face education, has begun to be called online education, distance education and digital education (Can, 2020). With the end of formal education, public administration education was also affected by this change and had to switch to digital education. During the COVID-19 global epidemic, it is particularly significant that the training is carried out digitally in terms of not interrupting the education. The fact that some universities were caught unprepared and without infrastructure in this process decreased the quality of education and brought some disadvantages. In order to analyze the benefits and disadvantages of transitioning to digital education during the global epidemic process, a survey was conducted on undergraduate students and the other section included information and findings of the research.

Method

Purpose of the Research

This study was carried out to examine the phenomenon of distance education during the global epidemic, analyzing the dynamics of education, the preparation of universities for distance education, and the effect of distance education on students.

The aim of the research is to investigate the impact of the COVID-19 global pandemic on public administration education. In this context, it was aimed to determine the possible effects of the COVID-19 global epidemic on public administration education by making a quantitative analysis through undergraduate students and to make suggestions and recommendations by evaluating the findings. In line with the purpose of the study, it was targeted to evaluate students' opinions and

attitudes about the global epidemic and digital education issues in the analysis conducted on undergraduate students.

Research Design

A quantitative study was conducted to analyze the impact of the COVID-19 global epidemic on public administration education. The questionnaire technique was preferred to collect detailed information about the demographic characteristics of the students receiving public administration education, their preferences on distance education, their views on distance education, the difficulties they encountered in the process, their satisfaction, and complaints.

The Universe and Sample of the Research

The population of the study is public administration undergraduate students and the sample is undergraduate students of Süleyman Demirel University, Department of Political Science and Public Administration. Necessary permissions were obtained from the Social and Human Sciences Ethics Committee of Süleyman Demirel University to apply the questionnaire to undergraduate students.

The research covers undergraduate students of Süleyman Demirel University, Department of Political Science and Public Administration. The total number of students in the department was 1058 and the research was limited to 734 people participating in the study. The limitation of the study was that some students had internet and connection problems and could not participate in the survey, although the survey prepared on Google Forms was tried to reach all students.

Table 1

The Participants' Background

No	Variable	Value	Frequency	Percentage
1	Gender	Female	384	52,32%
		Male	350	47,68%
2	Age	18	17	2,32
		19	70	9,54
		20	118	16,08
		21	163	22,21
		21 and over	366	49,86
3	Location	Urban	364	49,59
		Rural	370	50,41

Research Instrument

The data required for quantitative research were obtained with the survey data collection tool. Questionnaire method was used in the study and the scale of the questionnaire was developed by scholars. The preferred questionnaire for collecting and analyzing data was digitally created with Google Forms. In order to collect data, the questionnaire was opened to access on 24.07.2020 and accepting answers to the questionnaire was ended on 07.08.2020. In the questionnaire created with Google Forms, the questions were formed using multiple choice, linear scale, multiple choice table, confirmation tables and options called paragraphs. A total of 21 questions were included in the questionnaire. The first four questions were prepared for the demographic information of undergraduate students. Other questions in the questionnaire were designed for internet use during the global epidemic, students' satisfaction with online education and digital public administration education. Before collecting data, the checklist was controlled to see its validity employing the KMO test and its reliability using the Cronbach Alpha test. The coefficient of KMO was 0.819 and Cronbach Alpha 0.830, proving that the checklist was usable and dependable.

Data Collection

It was used the online sampling method to apply the questionnaire, and the students accessed and answered the questions via the questionnaire link created by Google Forms. Süleyman Demirel University Department of Political Science and Public Administration has a total capacity of 1058 students at the undergraduate level, 549 in the first education and 509 in the second education. Out of 1058 students, 734 students answered the questionnaire. Although the rate of participating in the survey and reaching students is 69.37% in the study, almost 70% of the students have been reached and a large participation has been achieved. Each question was marked as necessary in the questionnaire prepared on Google Forms so that each student who was reached could answer the questions in full, thus ensuring that each question was answered.

Data analysis

The answers obtained from the survey were analyzed with the MAXQDA 2020 Analytics Pro program. The survey responses were uploaded to the program via the Survey Data tab and each question was analyzed with the MAXQDA 2020 Analytics Pro program. Students were coded

between K1-K734, based on the principle of protecting personal data, and their answers were analyzed and evaluated without including the personal information of the students in the study.

Findings

Under this heading, the analysis of the answers given by the undergraduate students to the 21 questions in the questionnaire is evaluated. Primarily, the analysis of questions 1-4, which includes the demographic information of the students, and then the analysis and evaluation of questions 5-21 about public administration education during the global epidemic process were made.

MAXQDA 2020 Analytics Pro program was used to analyze the survey questions. The pro version of the program allows both qualitative and quantitative analysis. For the quantitative analysis of the survey questions, the Survey Data option in the import tab of the program was used. The answers to the survey questions were uploaded to the program via the "Import data from Excel table" tab via the Survey Data option and analyzes were made. In the program, a total of 31139 codes were coded for 734 students and 21 questions participating in the survey. As a result of the analysis obtained, the findings are presented in tables, figures and graphics. First, gender data of the participants were included.

RQ 1: How is the figure of academic interactions in the undergraduate public administration during pandemic?

Table 2

Document-based frequency table regarding the gender of the students participating in the study

	Documents	**%**	**% (Valid)**
Female	384	52,32	52,32
Male	350	47,68	47,68
Codded Documents	734	100,00	100,00

Table 2 includes the distribution of undergraduate students participating in the study by gender. The analyzed documents and coded documents correspond to the total number of students participating in the survey. It is seen that 52.32% of 734 students are female and the remaining 47.68 are male. As can be seen from the table, the number of women participating in the study

showed a distribution more than the number of men. Moreover, the age distribution of the students participating in the study is given in Table 3.

Age

Table 3

Document-based frequency table regarding the age of the students participating in the study

	Documents	%	% (Valid)
21 and over	366	49,86	49,86
21	163	22,21	22,21
20	118	16,08	16,08
19	70	9,54	9,54
18	17	2,32	2,32
Coded Documents	734	100,00	100,00

Table 3 includes the data regarding the distribution of the students participating in the study according to their ages. The most surveyed age range among students is the age group of 21 and over and its rate is 49.86%. The age group with the lowest level of participation in the study is 18 and has a distribution of 2.32%. The next table contains information on where the students live.

Residence

Table 4

Document-based frequency table regarding where the students participating in the study live

	Documents	%	% (Valid)
City Center	364	49,59	49,59
District Center	250	34,06	34,06
Village	64	8,72	8,72
Neighborhood	56	7,63	7,63
Coded Documents	734	100,00	100,00

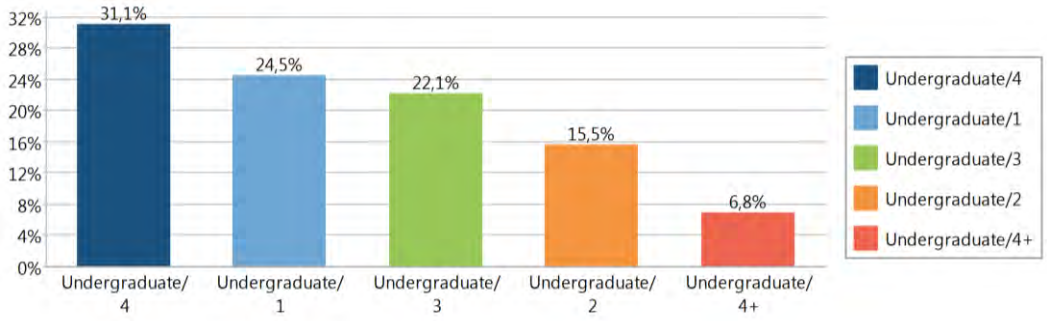
Table 4 includes the place of residence data, which is critical for online education in the global epidemic. It is seen that 49.59% of the students live in the city center. In the neighborhoods called old village settlements within the boundaries of the village and metropolitan areas, the population corresponding to the distribution of 16.35% of the students in total lives. According to the data obtained, almost half of the students do not live in the city center. The number of students living in the villages is higher than the students living in the neighborhood, and this has brought various problems in terms of online education. The fact that there are villages where the internet network cannot reach, the problems of connection and the economic lack of communication tools left students at a disadvantage in their education life. Before taking the decision to switch to distance education, it is of great importance for higher education institutions to do the necessary studies to determine the number of students who do not have internet access and to make the necessary studies by higher education institutions to benefit from online education. In the Graphic 1 below, the grade levels of the students participating in the research are shown.

Perception On Academic Implementation

Student Participation

Graph 1

Frequency graph showing the educational status of the students participating in the study



According to the graph, participation in the research was provided by undergraduate / 4 students mostly at a rate of 31.1%. The information in the document-based frequency table regarding the age of the students participating in the research is that the highest participation is aged 21 and over, and the data in this table that the highest participation is provided by undergraduate / 4 students are meaningful and valid. The lowest participation rates were provided as 15.5% for undergraduate / 2 students and 6.8% for undergraduate / 4 + students. However, the scarcity of the undergraduate

/ 4 + section is parallel to the small number of their total number. The data on the duration of internet usage of the students participating in the survey with different percentage distribution is given in figure 1.

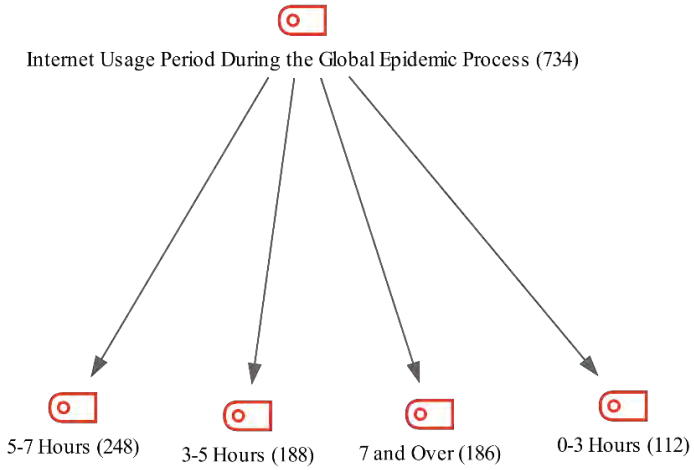
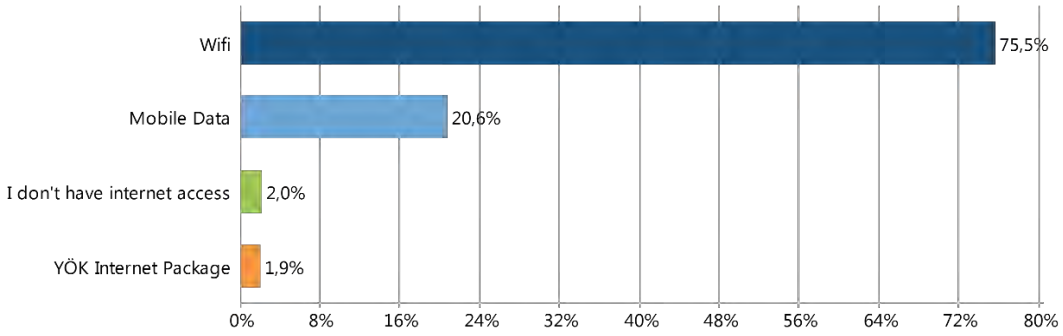


Figure 1. *The hierarchical code-subcode model of students' internet usage times during the global epidemic process*

In Figure 1, the fifth question in the survey, *"Your Internet Usage Period in the Global Epidemic Process?"* It is included the representation of the answers given to the question with the hierarchical code-subcode model. The hierarchical code-subcode model offers models that allow it to be seen together as a subcode in the answers at the same time as the research question (Aksu, 2019). According to the figure, the highest response was the duration of internet usage in the range of 5-7 hours, which was answered by 248 students, corresponding to a distribution of 33.8%. The fact that students use the internet for 5-7 hours also shows that students spend about 30% of their days on the internet during the global epidemic. The least internet usage time was 0-3 hours, which corresponds to the answer of 112 students, 15.3%. In the next graphic, students' methods of connecting to the internet to watch lectures are discussed.

Graph 2

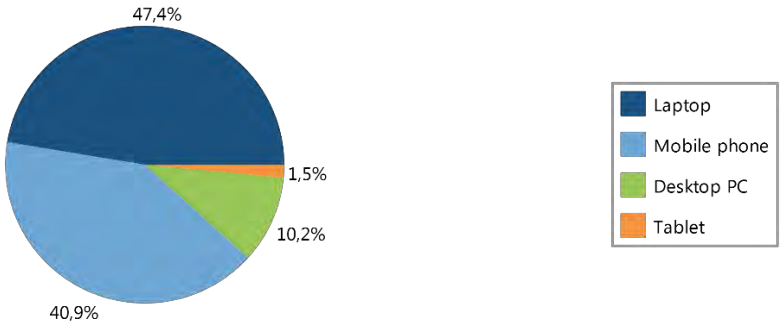
Frequency graph showing the methods of connecting students to the internet to watch online courses during the global epidemic process



The graphic above is the sixth question of the survey, *"Which One Did You Connect to The Internet to Watch Online Course During the Global Pandemic Process?"* shows the answers to the question. Graph 2 includes a frequency graph showing the methods of connecting students to the internet to watch online lessons. According to the graph, 75.5% of the students connect to the internet via Wi-Fi to watch online lessons. The remaining 24.5% cannot fully connect to the internet and have problems. Among the managements of connecting to the internet to watch online courses, the lowest rate is YÖK Internet Package with 1.9%. The rate of students without internet access is 2%. Furthermore, Graph 3 below shows with which tool students follow the lessons.

Graph 3

Frequency graph showing the instrument by which students watch the lessons during the global epidemic process



The seventh question of the graphic survey above, *"Which Vehicle Did You Watch the Lectures with During the Global Pandemic?"* shows the answers to the question. According to the chart, 47.4% of the students watched the lessons with a laptop computer. The device with the lowest rate of watching online courses was the tablet. Only 1.5% of the students followed the lessons through the tablet. A similar result has been obtained in the study conducted by Karadağ and Yücel (2020,

p. 186) and "64% of the students do their distance education from computers or tablets; 32% of them continue from their smart phones; 23% of them stated that they could not continue their distance education". Students who are partners in both studies mostly prefer laptop computers for online classes and students who have no internet access. When it comes to education, it becomes necessary to protect the right to education of every student, from the city center to the village living, by responsible persons and to complete the necessary infrastructure deficiencies. Figure 2 shows the level of participation of the students, who constitute one of the most important questions of the research.

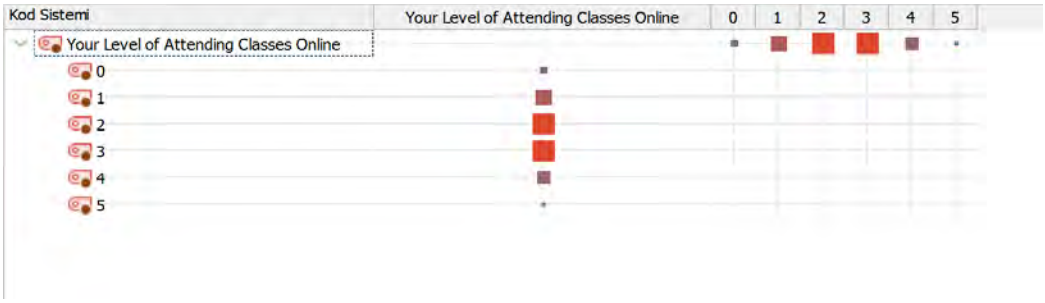


Figure 2. *Code relationships scanner showing the level of online participation of students in classes during the global epidemic process*

The figure above is the eighth question of the survey, *"What is Your Online Attendance Level in the Global Pandemic Process?"* shows the answers to the question. Figure 2 includes the code relationships scanner, which shows the online attendance levels of students in the global epidemic. The code relations scanner assigns a shape weighting according to the ratio of the responses to the questions and is arranged in descending order, preferably circular or square, according to the ratio of the responses. In Figure 2, the use of a visual square is preferred. Students were asked to choose a grade between 0-5 in order to determine their level of online attendance. According to the figure, the level of online participation of students in classes is the three (3) options most marked by 201 students. 201 people, corresponding to 27.4% of the students, determined their level of attending classes online as three. If the lowest participation level is five, it was chosen by 27 students and corresponds to 3.7%. Since it is predicted that there are various reasons for not attending the courses online, the students were asked what these reasons were in the other question.

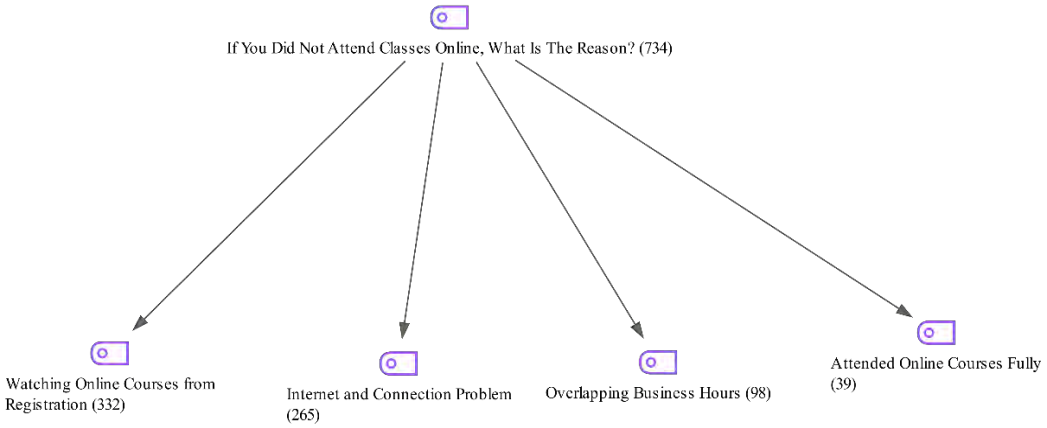


Figure 3. *The hierarchical code-subcode model showing the reasons why students do not attend classes online during the global epidemic process*

The ninth question of the survey, *"If You Didn't Attend Classes Online During the Global Epidemic Process, The Reason for This What is it?"* shows the answers to the question. Figure 3 includes the hierarchical code-subcode model that shows the reasons why students cannot attend classes online during the global epidemic process. According to the figure, 332 people, corresponding to 45.2% of the students, stated that they did not attend the classes online because they can be watched online. 39 people, equivalent to 5.3% of the students, answered that I fully participated in the least preferred online courses. 265 students, corresponding to 36.1% of the students, stated that they could not attend the classes due to the internet and connection problems, and the internet connection problem was also included in the question of the most common problems students had in online classes. To analyze other students' evaluations about the application they use to connect to online courses, the other question included Adobe Connect application.

RQ 2: How is the perception of students and teachers in the academic implementation for the undergraduate students of public administration during pandemic?

Graph 4

Frequency graph showing students' evaluations of Adobe Connect application during the global epidemic process

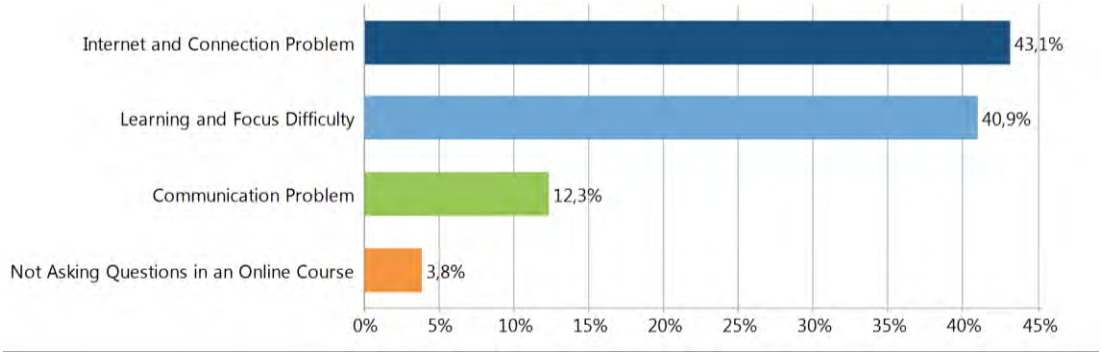
The tenth question of the graphic survey above, *"Adobe Used by Your University for Online Courses During the Global Pandemic How did you find the Connect Application?"* shows the answers to the question. Graph 4 includes the frequency graph showing the evaluation of the students regarding the Adobe Connect Application preferred by Süleyman Demirel University for online education during the global epidemic process. While the good and incredibly good answers given by the students correspond to the rate of 57.7%, it is seen that the rate of students who did not respond well to the application was 42.3% in total. In another question, during the global epidemic process, the most common answer given to the application that students deemed incomplete and inadequate in public administration education was the Adobe Connect Application. The students' evaluations about the application are as follows;

- K109 "Adobe Connect connection problems must be resolved",
- K143 "Adobe Connect access error needs to be improved".

The application is an application that needs to be developed according to the students and is suitable for technical problems in terms of infrastructure. At this point, universities should receive feedback from students about the applications they use for online education and the necessary technical support should be given for education.

Graph 5

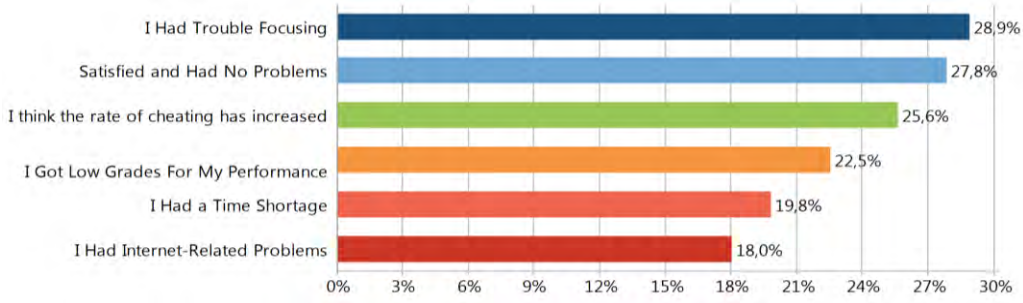
Frequency graph showing the most common problems experienced by students in online courses during the global epidemic process



The eleventh question of the graphic survey above, *"Which Problem Did You Experience Most in Online Classes During the Global Pandemic Process?"* shows the answers to the question. In Graph 5, the frequency chart showing the most common problems experienced by students in online courses during the global epidemic is included. While 43.1% of the students had internet and connection problems, the lowest rate, 3.8%, had the problem of not asking questions in online lessons. In a similar study, the findings obtained in the study by Kurnaz and Serçemeli (2020, p. 281) stated, "Not everyone has internet access, it is a big disadvantage that incomprehensible issues are not questioned immediately, and issues such as questions, answers and the student's understanding of the lesson cannot be fully understood because there is no interaction." The negative aspects of the online education listed have reached the same conclusion with the analysis of the most frequently experienced problems. The student coded K191 listed the most common problems as "Connection problem, not being able to ask questions and focusing problem". K364 coded student said, “The communication aspect of education remained incomplete. While the lack of face-to-face training causes problems such as focusing, concentration, situations such as not being able to ask questions are the factors that prevent learning, and he expressed the problems he experienced in online lessons. In the next graphic, students' opinions about online exams are given.

Graph 6

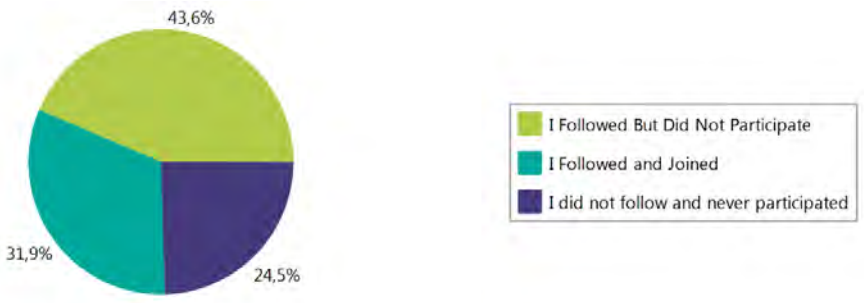
Frequency graph showing students' thoughts about online exams during the global epidemic process



The twelfth question of the graphic survey above, *"Your Opinion About Online Exams During the Global Pandemic Process What is it?"* shows the answers to the question. Graphic 6 includes the frequency graph showing the thoughts of the students about the online exams entering the education life with the global epidemic. Students had the most focus problems in online exams and thought that the rate of cheating increased. 27.8% of the students stated that they were satisfied with the online exam application and had no problems. The third problem in this study, which 18% of students experienced, was the internet-related problem. The answer to the most frequent focus problem was repeated by the student coded K74, and the expression "I think the main problems are focus and internet" was stated. The student coded K578 stated the problem he was experiencing and said, "I could not get efficiency in my lessons, I could not focus and I had problems in online exams." When evaluated generally, the students emphasized that they experienced problems related to focus and internet. The student with the code K454 drew attention to the inequality of opportunity in online education with the answer “Homework, lessons and exams are given with the thought that everyone has equal opportunities” with a different perspective. Graph 7, on the other hand, reflects students' views on practices that contribute to educational diversity such as online interviews and assistive applications.

Graph 7

Frequency graph showing students' participation in extracurricular conversations during the global



The thirteenth question of the graphic survey above, *"Did You Follow and Participate in Extracurricular Talks During the Global Pandemic Process?"* shows the answers to the question. Graph 7 includes a graphic showing the students' participation in and following the extracurricular interviews. Some faculty members from the Department of Political Science and Public Administration at Süleyman Demirel University also held online career interviews and attended the lectures by faculty members from different universities. According to the graph, 43.6% of the students stated that they followed the interviews but did not participate. The rate of students who do not follow and never attend the extracurricular interviews is 24.5%. The rate of students who follow and participate in online interviews is 31.9%. In the answers to the question of what is missing in public administration education in the global epidemic, those related to the interviews are as follows;

- K350 "I am in favor of broadcasting interviews and some lessons live on YouTube, if we do it this way, it will be an efficient initiative that will increase participation and benefit many people."
- K355 “Identifying students living in villages with internet problems and applying separate treatment. Separate treatment does not mean privilege, because they fall behind from online lessons and interviews, a different examination system can be applied or additional document support can be provided to those students”.

When students' opinions about online interviews are evaluated, it is understood that they want to benefit more from the conversation. The answers to this question are given in Figure 4 below.

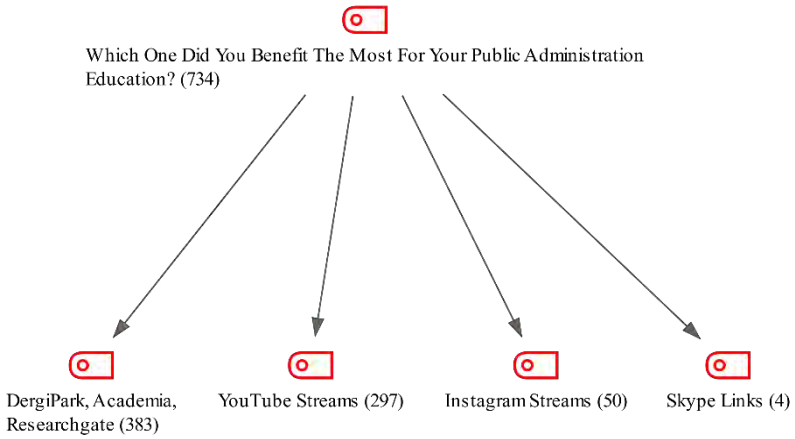


Figure 4. *The hierarchical code-subcode model of the platforms that students benefit most in public administration education during the global epidemic process*

In Figure 4, *Which One Did You Benefit the Most for Your Public Administration Education During the Global Epidemic Process?* The hierarchical code-subcode model of the answers to the question is included. Students, equivalent to 52.2% for public administration trainings in the global epidemic, were most frequently referred to as DergiPark, Academia, ResearchGate, etc. They stated that they benefited from sites. The reason for this is that the assignments that replace the exam are requested in article format. The platform the students made the least use of was Skype Connections with the answer given by 4 people corresponding to a 0.5% distribution. The opinions of the students regarding the participation of academicians from different universities to enrich the courses are given in Table 4.

Students Opinion

Table 5

Document-based frequency table of students' opinions on the participation of academicians from different universities in public administration courses during the global epidemic process

	Documents	%	% (Valid)
I found it Useful and Necessary	512	69,75	69,75
Irresolute	194	26,43	26,43
I found it useless and unnecessary	28	3,81	3,81
Coded Documents	734	100,00	100,00

The table above, which is the fifteenth question of the survey, *"Public Administration Courses in the Global Pandemic Process from Different Universities How Do You Evaluate Academics' Participation?"* shows the answers to the question. Table 5 includes a document-based frequency table showing the opinions of students regarding the participation of academicians from different universities as guests in public administration courses during the global epidemic process. Students found the participation of academicians from different universities useful and necessary at a rate of 69.75% as guests. The number of students who find it useless and unnecessary is 28, which corresponds to 3.81%. The level of satisfaction with public administration education in the COVID-19 process is as follows.

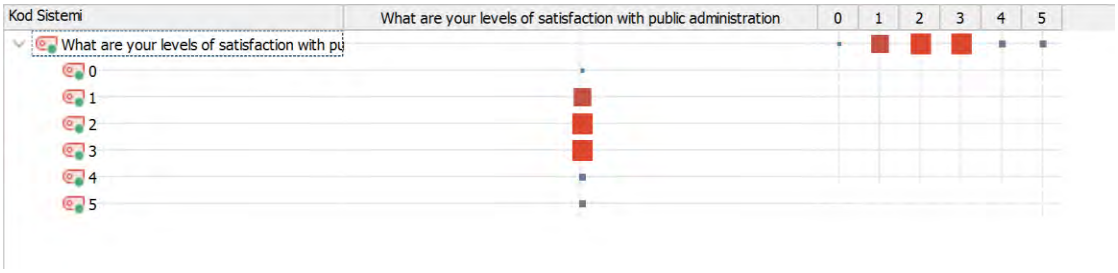
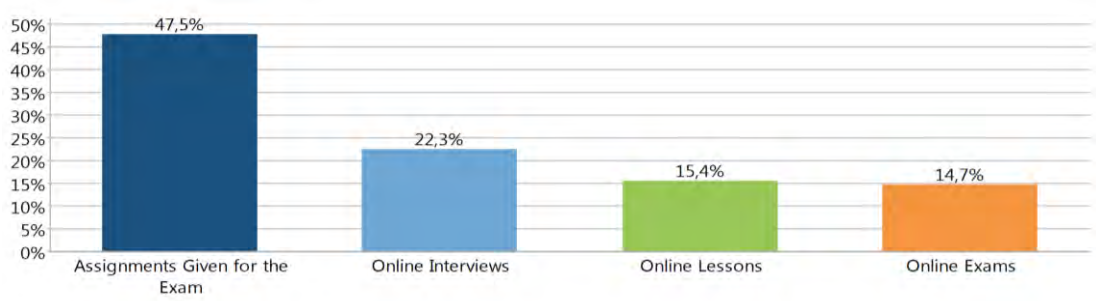


Figure 5. *Code relationships scanner showing students' satisfaction with public administration education during the global epidemic process*

The figure above is the sixteenth question of the survey, *"What is your satisfaction level with your public administration education during the global epidemic process?"* shows the answers to the question. Figure 5 includes the code relationships scanner, which shows the satisfaction levels of students from public administration education in the global epidemic. Students were asked to indicate their level of satisfaction with a value between 0-5. Two satisfaction levels were specified by 185 people. The least answer was zero, and the level of satisfaction was indicated by 45 students. It is observed that students are generally not satisfied with the online education they have encountered for the first time and their level of satisfaction is not extremely high.

Graph 8

Frequency chart showing the most satisfied practice of students in public administration education during the global epidemic process



The graphic above shows the answers to the seventeenth question of the survey, *"Which Application Are You Most Satisfied with in Public Administration Education During the Global Pandemic?"* Graph 8 includes a frequency chart showing the most satisfied practices of students in public administration education during the global epidemic process. 47.5% of the students were satisfied with the homework given instead of the exam. The least satisfaction came from the 14.7% students who answered online exams. Regarding the assignments given instead of the exam, the student coded K484 stated that "The homework given by the teachers were more effective than the lessons he taught". The most satisfied practice in public administration education was that the assigned assignments were directed to research and students learned new information in the global epidemic.

Table 6

Document-based display of word frequency and degrees related to the practice that students deem deficient and inadequate in public administration education during the global epidemic process

Word	Frequency	%
Deficiency	12	0,3
Score	12	0,3
Efficiency	10	0,8
Program	8	0,2
Insufficient	8	0,2
Difficulty	8	0,2
Heavy	6	0,7
Research	6	0,7
Interactive	6	0,7
Career	6	0,7

Deductions	6	0,7
I wish	6	0,7
Students	6	0,7
Points	6	0,7
I had difficulty	6	0,17

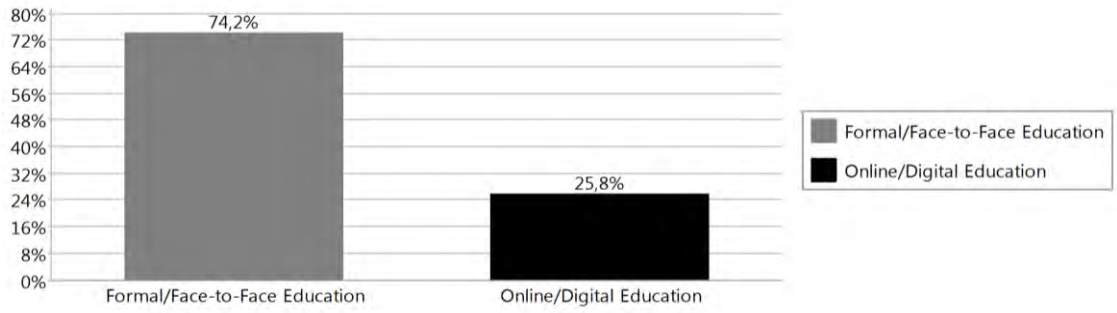
Table 6 includes the document-based presentation of the research findings of word frequency and degrees. In the Global Epidemic Process, which is the 18th question of the survey, *"What Is Incomplete and Inadequate Practice in Public Administration Education and What Would You Like to Do for It?"* The answers to the question were accepted with the paragraph tab and the answers were transferred to the MAXQDA Analytics Pro program on a document basis. In the table, the order of the frequency values of the most frequently repeated words in descending order is given. It is seen that the word with the highest frequency value is deficiency (12 times) and the one with the lowest frequency value is forced (6 times). Some of the sentences that the students made with the word deficiency that they most frequently repeat in the 18th question are as follows;

- K538 "The training is ideal for this period, but there are still deficiencies",
- K677 "Lack of technological infrastructure and lack of opportunity for students having difficulty in finding opportunities is a great deficiency".

When looking at the sentences established with deficiencies and the answers to other questions, it is seen that students who have the necessary opportunities for digital education are very sensitive to students who experience impossibilities and express their problems at the first opportunity.

Graph 9

Frequency chart showing how students want public administration education to continue when the global epidemic process ends



The twentieth question of the graphic survey above, *"How Do You Want Your Public Administration Education to Continue When the Global Pandemic Process Ends?"* shows the answers to the question. Graph 9 includes the frequency graph showing how students want their education to continue when the global epidemic ends. Most students want 74.2% to continue their education in a formal way. As can be understood from the results of other analysis, the problems experienced and the determination of the level of satisfaction as three (medium level) indicate that they do not want online education when the global epidemic is over. 25.8% of the students are satisfied with online education and want to continue their education digitally when the global epidemic is over. Contrary to the result obtained in this study, in the study conducted by Afşar and Büyükdoğan (2020, p. 173), it was found that "Approximately half of the students (46%) stated that they would prefer distance education for certain courses after the pandemic process is over". The result obtained in this study is that more than half of the students wanted to continue their education life as before.

Discussion

The findings of this study show that education life was adversely affected during the COVID-19 global epidemic, students had difficulties in adapting at the beginning of the distance education process, universities were caught unprepared in the transition from formal education to distance education, and students wanted to continue their education life face to face after the pandemic. There are various reasons students want to continue their education face to face. One of these reasons is the internet access problem. According to the findings obtained in the study, some students had difficulties accessing the internet. Some students could not access the internet. Experiencing an internet access problem means not accessing education and being deprived of education during the global epidemic process.

In a study conducted by Marangoz and Kırlı Özen (2021), it was stated that 43% of the total number of students worldwide do not have internet access at home. This rate shows that most students are deprived of education. Similarly, 15% of the students who make up the sample of this study use the internet only between 0-3 hours during the global epidemic, and 2% of them do not have internet access points to the problem of internet access. As in the rest of the world, the issue of students' internet access needs to be resolved in the case of Turkey. If we live in the digital age, there should not be a single student who cannot access the internet.

During the global epidemic, many problems have been identified in the students who have internet access and attend the classes. At the beginning of these problems is the internet and connection problem arising from the infrastructure of universities. According to the findings obtained in the study, 42.3% of the students stated that they were not satisfied with the application used to conduct the lessons during the global epidemic process of the university and that they had problems. Internet and connection problems caused the most learning and focusing issues. The fact that the lessons could not be held due to technical difficulties and internet-related disconnections affected the students.

In a study conducted by Mahyoob (2020), the problems students faced in the English Language Teaching department during the global epidemic were investigated. It has been determined that students have learning and interaction problems in distance education. Most of their students missed communication with academicians during the distance education process. Similarly, in this study, it was concluded that 12.3% of the Department of Public Administration students had communication problems in online courses. It has been observed that students have similar issues regardless of the countries they live in or the departments they study. The global epidemic has caused the same problems around the world. Students, on the other hand, faced similar problems in education. Elimination of these problems will increase students' success and improve the quality of education at the same rate.

As discussed above, distance education brought various problems and dragged some students to a disadvantageous position. However, it should not be evaluated only negatively. There are multiple advantages and positive aspects of distance education. Online exams are one of these advantages. According to the findings obtained in the study, the students were generally satisfied with the online exams. The fact that extracurricular online conversations, events, conferences, and publications have entered our lives with the global epidemic has pleased the students. Despite the health problems experienced in the worldwide epidemic, anxiety about the future, and difficulties in education, the students evaluated their satisfaction level as 3 (moderate). If the global epidemic ends, 74.2% of the students want to continue their education face to face.

In a study conducted by Alam (2022), the degree of satisfaction of students towards distance education was measured with a questionnaire technique during the pandemic period. It was concluded that the students were generally satisfied with the distance education applications. The most important factor affecting the satisfaction level of the students is their good communication

with their classmates and faculty members. Two problems that students experienced were dissatisfaction. As in this study, learning difficulty and effectiveness in distance education decreased satisfaction. Another problem with which students are dissatisfied is that they are bored with the online assignments given by the lecturers. Studies in the literature and the findings obtained from this study have shown that students mostly face internet connection and access, lack of communication, learning, and focusing problems in the global epidemic.

Conclusion

A research survey was created with Google Forms to analyze the impact of the COVID-19 pandemic on public administration education. The questionnaire consists of 21 questions and includes questions that address digital education in all dimensions. The high rate of participation gave the questions an opportunity to be evaluated in all aspects. For the analysis of the survey questions, MAXQDA 2020 Analytics Pro program was used and the answers were imported with the help of Excel table via the Survey Data tab.

The findings showed that students living in villages who do not have internet access in the global epidemic are distant from education in distance education. Some of the students could not access the internet at all, and the students who could access had mostly internet and connection problems. The students' problems related to internet access and internet connection also affected their online participation levels and students stated that they were able to attend classes at the level three (intermediate) level coded 0-5 online. When the reason for not attending the courses online was wanted to be investigated, the most responses were to be able to watch online courses from the record and the internet and connection problem was answered. The application used by the university to teach courses online is an application where almost half of the students have problems and they want technical problems to be solved. Due to the technical problems occurrence, students mostly experienced internet and connection problems during online lessons. Connection problems experienced in online lessons and the presence of students who could not find the opportunity to participate in online lessons also affected online exams. Students experienced the most focus and time problems in online exams.

When the advantages and disadvantages of digital education are evaluated together, students' level of satisfaction with public administration education in the global epidemic is analyzed as three

(medium level). During this process, the students were most satisfied with the homework application given instead of the exam. The participation of academicians from different universities in the courses and online interviews are among the practices that students describe as efficient and useful in the global epidemic.

The global epidemic and pandemic process has affected education and students negatively as well as affecting the whole world. Problems were encountered in education due to the transition to an unaccustomed education system, the unprepared start of this process, and the lack of the same opportunities for every student. Students mostly experienced the lack of communication and formal education in online education. For this reason, when the global epidemic ends, approximately 75% of the students want to continue their education formally. The COVID-19 epidemic, which threatened human life at a fatal point, impressed the education of students as well as their moods. During this process, students defined themselves as hopeless, unhappy, bored, anxious and anxious.

For students who cannot attend the classes online, the variety and number of information and lecture notes should be increased and shared with students. Likewise, the records of online conversations that students want to participate but cannot attend due to internet-based questions should be defined in student information systems and allowed to watch later. For future studies, it is recommended to conduct qualitative and quantitative studies on what the students experience in this process, in which subjects are advantageous and disadvantageous.

References

Afşar, B., & Büyükdoğan, B. (2020). Covid-19 pandemisi döneminde İİBF ve SBBF öğrencilerinin uzaktan eğitim hakkındaki değerlendirmeleri, *Karatay Sosyal Araştırmalar Dergisi*, (5), 161–182.

Akman, E. & Kocaoğlu, M. (2019). Kamu yönetimi lisans eğitiminde teknoloji kullanımı: Ahi Evran, Çankırı Karatekin ve Karamanoğlu Mehmet Bey Üniversiteleri örneği. *Uluslararası Yönetim İktisat ve İşletme Dergisi,* 15(1), 118–142. doi:10.17130/ijmeb.2019149862

Aksu, D. (2019). *Kurumsal politikanın işe yabancılaşma üzerindeki etkisi: Isparta ili PTT çalışanları üzerinden nitel bir analiz,* [Master's thesis, Süleyman Demirel University]. https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=gT7u0dglDIDLOiHJo0AlQQ&no=dVi8KKVFM3tD_TeJmOW9Yg

Alam, F. A. (2022). The survey on students'satisfactiondegreetowardsonline learningduring Covid-19 pandemic condition, *JELITA: Journal of English Language Teaching and Literature,* 3(1), 44-56.

Arnhold, N., Brajkovic, L., Nikolaev, D. and Zavalina, P. (2020). *Tertiary education and covid-19COVID-19: Impact and mitigation strategies in Eeurope and Ccentral Aasia.* World Bank's Education Global Practice. https://documents1.worldbank.org/curated/en/783451590702592897/COVID-19-Impact-on-Tertiary-Education-in-Europe-and-Central-Asia.pdf

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Hum Behav & Emerg Tech,* 2, 113–115. doi:10.1002/hbe2.191

BBC News, T. (2020*). Koronavirüs: Sosyal mesafe ve kendini izole etmek ne demek?* BBC News Turkish. https://www.bbc.com/turkce/haberler-dunya-52012336

Burki, T. K. (2020, 21 Mayıs). *Covid-19: Consequences for higher education.* Lancet Oncology, 758. US: Elsevier. Ltd. doi:10.1016/S1470-2045(20)30287-4

Can, E. (2020). Coronavirüs (Covid-19) pandemisi ve pedagojik yansımaları: Türkiye'de açık ve uzaktan eğitim uygulamaları. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi,* 6(2), 11–53.

Cepiku, D. (2012). Embracing disciplinary diversity: public administration education in Italy. *International Political Science Association*, 1–30.

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkaw, B., Glowatz, M., Burton, R., … Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1), 9–28. doi: https://doi.org/10.37074/jalt.2020.3.1.7.

Çalıkoğlu, A., & Gümüş, S. (2020). Yükseköğretimin geleceği: Covid-19'un öğretim, araştırma ve uluslararasılaşma konularındaki etkileri. *Yükseköğretim Dergisi.* Doi:10.2399/yod.20.005000.

Duraku, Z. H., & Hoxha, L. (2020). *The impact of COVID-19 on higher education: A study of interaction among students' mental health, attitudes toward online learning, study skills, and changes in students' life,* https://www.researchgate.net/publication/341599684_The_impact_of_COVID-19_on_higher_education_A_study_of_interaction_among_Kosovar_students%27_mental_health_attitudes_toward_online_learning_study_skills_and_lifestyle_changes

Erkut, E. (2020). Covid-19 sonrası yükseköğretim. *Yükseköğretim Dergisi,* 10, 1–9. doi:10.2399/yod.20.002

Griffin, M., Al-Jabir, A., Kerwan, A., Nicola, M., Alsafi, Z., Khan, M., … Agha, R. (2020). Impact of the Coronavirus (Covid-19) pandemic on surgical practice- Part 1. *International Journal of Surgery*, 79, 168–179. doi: 10.1016/j.ijsu.2020.05.022

Ince, F. & Evcil, F. Y. (2020). Covid-19'un Türkiye' deki ilk üç haftası. *Süleyman Demirel Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi,* 11(2), 236–241. doi:10.22312/sdusbed.719168

Karadağ, E., & Yücel, C. (2020). Yeni tip koronavirüs pandemisi döneminde üniversitelerde uzaktan eğitim: lisans öğrencileri kapsamında bir değerlendirme çalışması. *Yükseköğretim Dergisi*, 10, 1–12. doi:10.2399/yod.20.730688

Karata, Z. (2020). Covid-19 pandemisinin toplumsal etkileri, değişim ve güçlenme. *Türkiye Sosyal Hizmet Araştırmaları Dergisi*, 4(1), 3–17.

Kurnaz, E., & Serçemeli, M. (2020). Covid-19 pandemi döneminde akademisyenlerin uzaktan eğitim ve uzaktan muhasebe eğitimine yönelik bakış açıları üzerine bir araştırma. *Uluslararası Sosyal Bilimler Akademi Dergisi*, 2(3), 262–288.

Lall, S., & Singh, N. (2020). Covid-19: Unmasking the new face of Education. *International Journal of Research in Pharmaceutical Sciences,* 11(1), 48–53. doi: https://doi.org/10.26452/ijrps.v11iSPL1.2122

Mahyoob, M., (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners, *Arab World English Journal (AWEJ),* 11(4), 351-362. DOI: https://dx.doi.org/10.24093/awej/vol11no4.23

Marangoz, M., & Kırlı Özen, E. (2021). COVID-19 pandemi sürecinin farklı alanlarda dijitalleşmeye etkileri: kavramsal bir değerlendirme, Hitit Ekonomi ve Politika Dergisi, 1(1), 54-68.

McAuley, D. F., Mehta, P., Brown, M., Sanchez, E., Tattersall, R. S. & Manson, J. J. (2020). Covid-19: consider cytokine storm syndromes and immunosuppression. *The Lancet,* 395(10229), 1033–1034. Doi:10.1016/S0140-6736(20)30628-0

Memikoğlu, O., & Genç, V. (Ed.). (2020). *Covid-19.* Ankara: Ankara Üniversitesi Basımevi.

Neupane, D., Foundation, R. H., Maharjan, M. R. & Bhuju, D. (2020). Academic institutions at the time of Covid-19 pandemic. *International Journal of Science and Research*, 9(5), 91–93. doi:10.21275/SR20419121922

Report, M. W. (2020). *Severe outcomes among patients with coronavirus disease 2019 (Covid-19) — united states, february 12–march 16, 2020*. Morbidity and Mortality Weekly Report (C. 69). Doi:10.15585/mmwr.mm6912e2

Schleicher, A. (2020), The impact of COVID-19 on education- İnsights from education at a glance 2020, OECD, https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf

United Nations, (2020), Policy brief: education during COVID-19 and beyond, https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond

Telli Yamamoto, G., & Altun, D. (2020). Coronavirüs ve çevrimiçi (online) eğitimin önlenemeyen yükselişi. *Üniversite Araştırmaları Dergisi*, 3(1), 25–34. doi:10.32329/uad.711110

Yükseköğretim Bilgi Yönetim Sistemi. (2020). *Tablo 1. öğrenci sayıları i özet tablosu*. https://istatistik.yok.gov.tr/

Yükseköğretim Kurulu. (2020). *Basın Açıklaması.* https://basin.yok.gov.tr/AciklamaBelgeleri/2020/04-uzaktan-egitim-ve-yks-ertelenmesine-iliskin.pdf

Yükseköğretim Kurulu. (2020). *Koronavirüs (Covid-19) Bilgilendirme Notu: 1. Yükseköğretim Kurulu Basın ve Halkla İlişkiler Müşavirliği.* https://basin.yok.gov.tr/AciklamaBelgeleri/2020/02-coronavirus-bilgilendirme-notu-1.pdf