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UNDERGRADUATE STUDENTS' VIEWS ABOUT EMERGENCY DISTANCE EDUCATION DURING THE COVID-19 PANDEMIC

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Abstract:
With the Covid-19 pandemic, which was effective all over the world in early 2020, emergency distance education applications started. Universities in Turkey also suffered from this situation and quickly started their own distance education applications using their own facilities. Different applications carried out by universities have had different reflections upon education. For example, while some universities provided compulsory live classes, some universities did not. Students are the most important component of this process. In this respect, the purpose of this study was to examine university students' views about emergency distance education during the Covid-19 pandemic. In this qualitatively designed study, 32 students from 4 different universities were asked for their views. An online questionnaire form made up of open-ended questions was used as the data collection tool. The data were analyzed using the content analysis method, and the themes were created. As a result, two of the four universities used the software of Microsoft Teams as a distance education system, while others preferred the software of Moodle and ALMS. It could be said that the students who used Microsoft Teams, which is an integrated system where live lessons can be held, were more satisfied in this process. In addition, the students' views about the distance education system, the positive and negative aspects of the system, live course practices, communication with the instructor, getting feedback, socialization, motivation, academic performance, comparison with traditional teaching, etc. were reported and interpreted within the scope of the theories of Uses and Gratifications and Diffusion of Innovations. It was seen that among the university students almost all of whom were anxious before the distance education, the worries of those who took live lessons and used an integrated system were completely removed. In this respect, within the scope of the distance education system, it could be stated that the elements of live lessons and interaction have great importance for students.

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1. Introduction

Due to the Covid-19 pandemic, which emerged in China in late 2019 and was influential all over the world at the beginning of 2020, restaurants, cafes and educational institutions were closed almost all over the world in the Spring Term of the 2019-2020 academic year, and quarantine practices at various levels were initiated (Mohmmed et al., 2020). Normalization steps were taken to revive the economy in the summer months, and many businesses began to serve again. However, this situation has led to a further increase in the number of cases. As of September 8, 2020, the number of daily cases in the world was over 200.000, and the total number of cases was over 27 million. The number of cases shows that the effects of the Covid-19 pandemic are increasing. The situation is similar in our country, and the number of cases is observed to increase. Experts point out that the second wave might appear especially in Autumn.

All these developments have increased the importance of remote working and distance education all over the world. Digitalization efforts of all institutions have reached the highest level. Especially in this period, when online conference systems are used extensively, both the business world and the field of education have undergone a constant irreversible change. Nothing will any longer be the same as it was in the past. Online conference systems and distance education have become an indispensable part of life (Durak et al., 2020).

In line with these developments, schools all over the world have mostly started giving distance education in the Spring Term of the 2019-2020 academic year and completed this period in this way. It is seen that this trend will continue in the 2020-2021 academic year. In Turkey, especially for universities in Turkey, the Coronavirus Scientific Committee stated that distance education practices should continue.

In this process, all students and instructors tried to quickly adapt themselves to distance education applications even though they had no previous related experience. Studies indicate that the focus of educational institutions in this process was not on pedagogy but limited to presenting the curriculum online with various tools (Eder, 2020). In order for online learning to be successful, it should be planned systematically, and the instructional design should be done accordingly (Agormedah et al., 2020; Branch & Dousay, 2015). These design processes have great influence on the quality of distance education. It is stated that there are 9 dimensions in planning distance education: modality, speed, student-instructor ratio, pedagogy, the online role of the instructor, the online role of the student, online communication, the role of online evaluation and the source of feedback (Hodges et al., 2020).

Another issue in the success of distance education is the training of instructors. Instructors who will provide distance education are expected to have knowledge about the theoretical foundations of distance education and to have taken at least one course

through distance education (Shattuck et al., 2011). Since there was not enough time and opportunities to train the instructors during the pandemic process or to plan the distance education systematically, the distance education practices carried out in this period were called "emergency distance education". It is inevitable that this situation will reflect negatively on the quality of distance education. However, educational institutions have preferred emergency distance education practices rather than doing nothing. Educational institutions have had to give training to their instructors only to a limited extent. What was done was generally to inform the instructors about how to use distance education tools. This situation has led to the emergence of unplanned and quite different distance education applications. In a study conducted, Distance Education administrators of universities mostly stated that they were not sure about the preparations of their academic staff for this process (Durak et al., 2020).

The fact that the universities were not prepared in terms of their technical infrastructures caused frequent connection and technical problems in this process. All these factors could be predicted to cause a negative change in the attitudes of some instructors who have had an unsuccessful experience in distance education (Gaeth et al., 1997). The wrong choices made by educational institutions (preferences for learning management system and live lesson software, etc.) may have caused the instructors to experience difficulties and problems in this process.

1.1. Purpose and Importance

As a result of the emergency distance education attempts carried out by universities in the Covid-19 process, it is important to determine the experiences of students in this process in terms of examining the process from a different perspective. After all, the only purpose of these attempts was to try to provide students with the highest quality education. An important way to evaluate the distance education practices of universities in the Covid-19 process is to ask students for their views. It is thought that the present study, in which students identified their experiences in this process and expressed their views about successful or unsuccessful practices in the process, will form the basis for future research. In addition, the study gives clues about how prepared universities are for this process. Moreover, in order to reveal the importance of distance education, the graph showing the change in the number of studies in the Scopus database regarding "online learning" can be seen in Figure 1.

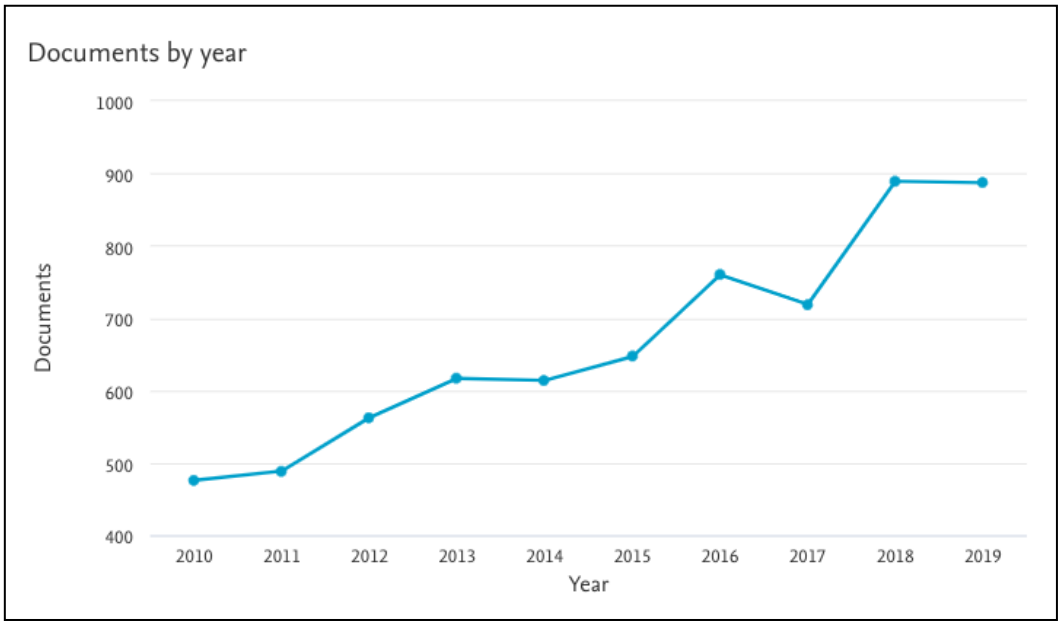

Figure 1: Online Learning Research Trends

As seen in Figure 1, the number of scientific studies related to online learning only in the field of social sciences has increased significantly over the years. This situation could be considered as an indicator that the importance of online learning is gradually increasing and that it will become an indispensable part of education. The pandemic period has increased the importance of distance education even more. It could be stated that determining students' views about the attempts of higher education institutions for urgent distance education in this pandemic period will contribute to the related literature. In this respect, the purpose of this study was to examine the views of university students about the distance education process they experienced during the Covid-19 pandemic.

2. Literature Review

One of the most important elements in emergency distance education has emerged as mutual interaction with students. In particular, students under the age of 20 faced a prohibition of leaving home for a long time during this period. At this point, the importance of live lesson software, which will maximize the interaction, increased, and synchronous applications were recommended by the Council of Higher Education (CHE). In the literature, it is seen that there are many studies conducted on live lesson software (Herand & Hatipoğlu, 2014; Işık et al., 2010; İzmirli & Akyüz, 2017; Lavolette et al., 2010; Mbiydzenyuy & Silungwe, 2020; Schullo et al., 2007; Yıldırım et al., 2011). In some studies, the synchronous softwares of different brands were compared, and their strengths and weaknesses were tried to be determined. As it is known, the software world is very active, and it is in a constant change with updates and new software. Therefore, it could be stated that such studies will soon become out of date, and new comparison studies will be needed at regular intervals. In live lesson softwares, there are various dimensions including the limited number of students, the cost, interactional features, the

number of camera images that can be displayed simultaneously and the tools to be used. Such features that determine the preferences of institutions could also be directly related to the quality of distance education.

In a study, the effects of the pandemic period on distance education in the Arab world were examined. The research data were collected through analysis of social media posts, online classrooms and interviews. As a result, the distance education system was found to have negative effects on education because it was not pedagogically or psychologically ready. In addition, it was revealed that the negative consequences of staying at home such as stress, anxiety, depression, domestic violence, and divorce negatively affected the teaching and learning of teachers and students. It was reported that there were attempts to turn the emergency distance education demand into a profit in an ethical or unethical manner. Although Arab culture is socially known for its close relations, it was pointed out that the social distance rules were accepted by Arabs in this process (Al Lily et al., 2020)

In a study conducted in Turkey (UAR), the university students' levels of satisfaction with distance education applications in the pandemic period were investigated. In the study carried out with 17939 students, it was revealed that the students were satisfied with the decisions taken by CHE but not satisfied with the digital content offered by their universities. Among the students, 64% of them were not satisfied with the distance education preparations of their universities and faculties, and 51% of them reported that instructors had "bad" or "very bad" levels of distance education skills. Of all the students, 48% of the students considered the sound and image quality of the distance education system to be "bad" or "very bad". The state universities most satisfied with their own university were Abdullah Gül University, Çanakkale Onsekiz Mart University, İzmir High Technology University, İskenderun Technical University and Yıldız Technical University (Karadağ & Yücel, 2020). Based on the results of this study carried out with quite a large number of students using the survey method, it could be stated that the universities in Turkey were not much successful in this process at all.

In a study conducted in Slovakia, the views of the students about chemistry taught via a distance live course in the Covid-19 pandemic were examined. Among the students, 10% of them complained about the poor Internet speed and about the poor video quality. Of the students, 33% of them stated that they had difficulty understanding the topics in online lessons; that the teacher passed the topics very quickly; and that there was not enough time to ask questions, discuss or take notes. Therefore, in the study, it was suggested that teachers should spend more time interacting with students during live lessons and that live lessons should be recorded to let students watch them later again. In addition, the students reported that it would be more effective if the teacher wrote with a tool like Whiteboard. The students stated that the online lessons were more comfortable in a more relaxing environment than the lessons taught in the home environment and they stated that they were able to manage the time more effectively. It was revealed that 70% of the students preferred to work in a home environment and that the home environment was more comfortable and less stressful. Though the students

were happy because they could do the chemistry experiments with household chemicals, they were not satisfied in fact. Of all the students, 46% of them stated that they missed the experiments they in chemistry labs; 20% of them stated that they had concentration problems in live lessons; 5% of them stated that the exams were not fair and that students cheated in online exams; and 28% of them stated that they missed the interaction in the classroom (Babincakova & Bernard, 2020).

In a study conducted by Durak (2013) examining the delivery of a full undergraduate course content via distance education, it was revealed that the following points should be taken into consideration for a good-quality online course: complying with the principles of online course design, ensuring the interaction of learners with each other, content, interface and teachers, providing direct access to course resources, providing adequate guidance and timely feedback, ensuring the ideal number of and control over learners, providing learners with social support, providing sufficient motivation, using environments that include synchronous and asynchronous applications together rather than just one of both, teachers' allocating sufficient time to the preparation of the lesson, doing cooperative practices with the help of activities such as group assignments, providing the necessary equipment for the lesson, ensuring that the lesson hours are the most suitable hours for learners, and keeping this situation constant.

3. Theoretical Foundations

In the present study, which aimed to determine the views of graduate students about distance education in the Covid-19 process in Turkey, Rogers's Theory of Diffusion of Innovations was taken as basis due to the thought that the students received complete distance education for the first time in their education lives. In addition, whether the students are satisfied with the education they receive will be examined within the framework of the Uses and Gratifications Theory, which is another media theory.

3.1 Theory of Diffusion of Innovations

The theory of "Diffusion of Innovations", put forward by Rogers, basically consists of 4 elements: Innovation, Communication channel, Time and Social system. According to Rogers (2003), this diffusion is the process of communicating through certain channels in time between the members of a social system in relation to the "new". From another point of view, innovation can be defined as a new product, technology, perspective or solution for individuals or organizations (Demir, 2006).

Rogers (1995) pointed out that in his model, the process of deciding on innovation is made up of 5 stages: knowledge, persuasion, decision, implementation and confirmation. In the knowledge stage, the person learns about innovation and what it is used for. During the persuasion phase, the person evaluates the positive and negative aspects of this innovation for himself/herself and shapes his/her attitude accordingly. At the decision-making stage, the person decides to accept or reject the innovation. The

implementation phase takes place if the person's decision-making phase is positive. In the confirmation stage, the person confirms and strengthens the decision made (Orr, 2003). This study was regarded as an innovation in that the participants taking distance education in the pandemic process had not had such an experience before.

3.2 Theory of Uses and Gratifications

Depending on the development of technology, there might be changes in the concept of media covered in studies on the Uses and Gratifications Theory. In the past, studies were generally carried out involving the television, radio and newspapers, yet recently, there has been an increase in the number of studies on the use of the Internet, social media and mobile devices. Studies on the Uses and Gratifications Theory can explain why individuals use not only media but technologies as well (Durak, 2013). Elements of the uses and gratifications theory can be seen in Figure 2.

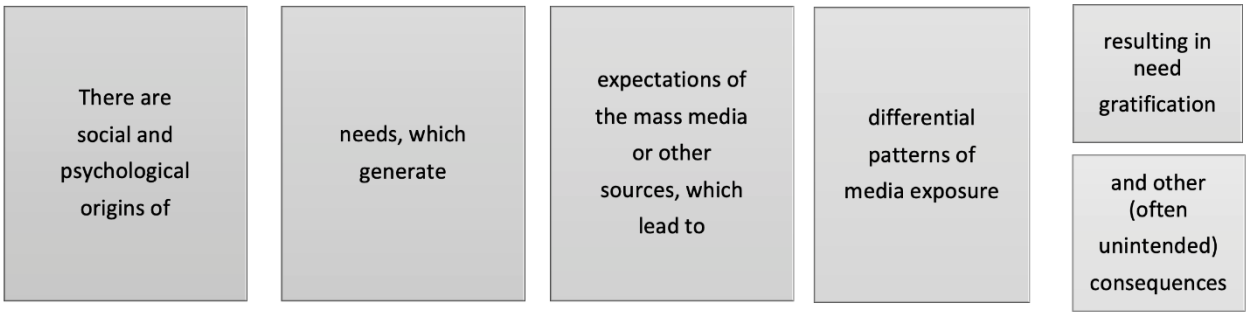

Figure 2: Elements of the Uses and Gratifications Theory (McQuail & Windahl, 2010)

4. Method

4.1 Research Model

The present study aimed to examine the students' views about distance education in the Covid-19 process in Turkey within the framework of theoretical foundations. This study, which was based on the qualitative design, was planned as a case study in a way to examine the related research topic in detail.

4.2 Data Collection Tool

In order to collect the data, a semi-structured interview form and an online form (via Google Form) containing the demographic information about the participants and quantitative elements to determine the usage of various elements were prepared. The interview questions were developed in line with the related literature and with the theoretical foundations of the study. The draft prepared was examined by field experts and finalized by making the necessary arrangements in the light of the experts' feedback.

4.3 Participants

The research universe included university students who took their lessons via distance education during the pandemic process. In this respect, the related data collection tool

was sent to academicians in some universities, and they were asked to apply it to their students. As a result, a total of 32 students from 4 different universities were reached. Table 1 presents the distribution of the students in accordance with the departments and universities.

Table 1: Distribution of the Students with respect to the Departments and Universities

University/Department	f	Group Coding
Balıkesir University Comp. Education and Inst. Technologies	9	BAUNx
İzmir Demokrasi University Management Information Systems Electric/Electronic Engineering	9 3	IDUx
Çanakkale Onsekiz Mart University Comp. Education and Inst. Technologies	6	COMUx
Sinop University Elementary School Teaching	5	SUx

In Table 1, the distributions of the students who replied to the interview questions can be seen with respect to their departments and universities. In addition, group coding was added to the students to be used in the data analysis and quotations. For example, the students at Balıkesir University were coded as BAUN1, BAUN2, …, BAUN9.

4.4 Data Analysis

The participants' responses to the online data collection tool were collected with Google Forms, and the data were checked. Afterwards, the data were arranged in tables to be used in the qualitative data analysis. The demographic information in the data collection tool and the quantitative items that were directed to determine the uses of some elements were analyzed using descriptive statistics. The findings obtained are presented together with the frequency values.

The interview recordings were transcribed and analyzed by the researchers, and each researcher made their own interview coding keys. To ensure the reliability of the coding keys, the researchers analyzed the consistency together and reached an agreement. Following this, the themes were constructed based on the theoretical basis of the study. In qualitative research, the data analysis process consists of description, analysis, and interpretation stages (Yildirim & Simsek, 2008). In the description stage, researchers try to determine what the interviewed individuals have said. In the analysis stage, they try to establish the relationships between the themes arising from the data. Finally, they complete the process with the interpretation of the findings.

4.5 Validity and Reliability

In order to ensure validity and reliability, the participants were informed about the fact that the collected data and their names would be kept confidential and would only be used for academic purposes. This was thought to allow obtaining the sincere opinions of the participants about the situation more easily.

The participants were informed about the issue of confidentiality. In the introduction part of the online form, participants were told that their real names would certainly be kept anonymous for the sake of validity. In this way, the researchers thought that the participants would elicit their honest views. Besides, the directly-quoted statements of the participants were given in order to reflect their views clearly. For the purpose of ensuring reliability, the findings were presented without making any comments.

5. Findings

This section includes the results of the analysis of the data obtained within the scope of the research purpose. Firstly, various statistics of the students regarding distance education were given in tables, and then the interview questions were divided into themes and codes within the framework of the theoretical foundations and presented with direct quotations.

Table 2: Courses Taken by the Students and the Platforms They Used in Accordance with Their Universities

University	Number of Courses Taken via Distance Education	The Distance Education System Used	The Live Lesson Platform Used
Balıkesir University	7-9	Moodle	NO
Sinop University	7-8	ALMS	NO
İzmir Demokrasi University	7-10	Microsoft Teams	Microsoft Teams
Çanakkale Onsekiz Mart University	6-7	Microsoft Teams	Microsoft Teams

In Table 2, based on the answers given by the students, the number of the courses they took via distance education in their universities were given as ranges. In addition, the students were asked which live-course software they used, and the students at Balıkesir University and Sinop University included in the study stated that there was no live course software used by their universities. Two students from Balıkesir University stated that a faculty member individually used the live course software called "Zoom". All the students studying at Izmir Democracy University and Çanakkale Onsekiz Mart University stated that they used the software called "Microsoft teams".

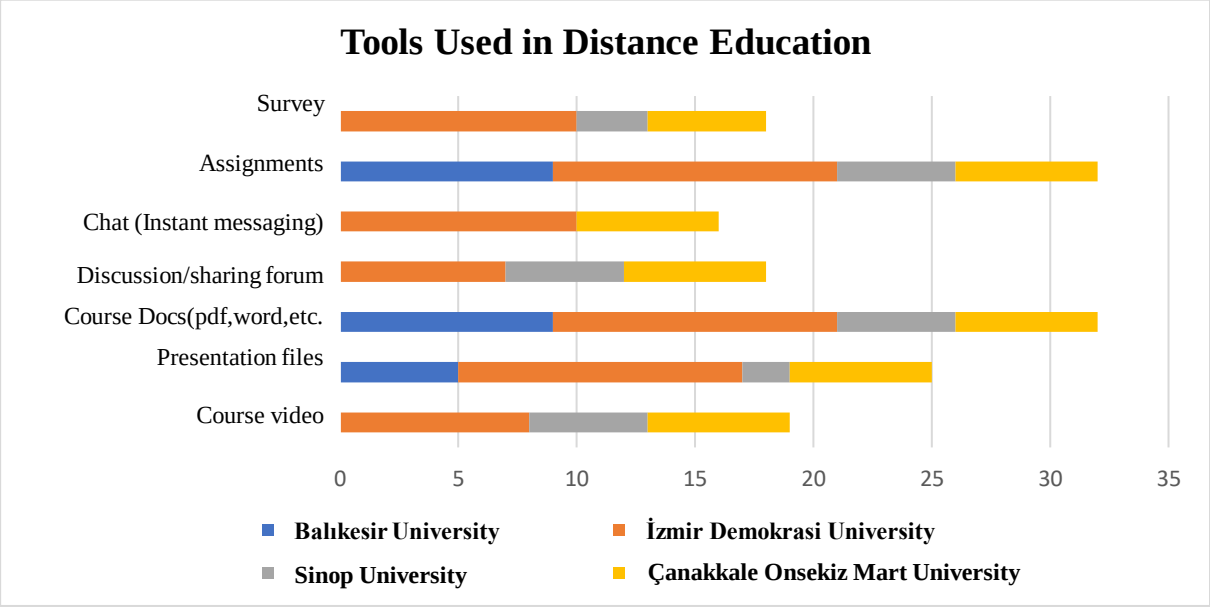

Figure 3: Distance Education Materials used at the Universities

Figure 3 presents the distance education tools offered in universities during the pandemic process in line with the students' answers. All the students stated that the documents in the form of pdf and Word, which are in the category of lecture notes at their universities, were presented, and that besides these documents, the element of submitting homework existed. These tools were followed by presentation files (PowerPoint) and lecture videos. It was also revealed that some universities offered discussion/sharing forums and instant chat applications in order to provide the interaction dimension, which is among the basic dimensions of distance education. Examination of how many of these above tools were used by which universities helped obtained the following results. According to the graph, the university offering the lowest number of tools was Balıkesir University (BAUN). It was emphasized by the students that they only shared homework, lecture notes and partly presentation files over the distance education systems in BAUN. According to the graph, Izmir Democracy University offered all the tools in their distance education systems. Similarly, Çanakkale Onsekiz Mart University (ÇOMU) offered the above tools for the use of students.

The participants were asked about the general structure of the system related to the distance education systems offered by the universities, about the problems they experienced in terms of live lessons and about the related shortcomings and positive aspects they identified, and the findings presented in Table 3 were obtained.

Table 3: General Features of the Distance Education System

Themes	Frequency (f)
Criticisms Regarding the Distance Education System	
• Complex structure of the system	12
• Lack of live lessons	12
• Connection problems	4
o Technical issues	
o System crashes	10
o Access problems	8
• Technological competence	3
• Problems caused by infrastructure and equipment	5
• Lack of interaction	16
• Disciplinary issues (complacency, frivolity, etc.)	18
Suggested solutions for the distance education system	
• A simpler system should be adopted	10
• Live lessons must be compulsory	12
• Instructions and warnings should be clear and timely	8
Positive features of synchronous lessons	
• Being a whole that includes many environments	17
• Saving course records and viewing them later	18
• Usefulness of add-ons such as chat, question-and-answer	8
• Possibility of ınteraction	10
Negative features of synchronous lessons	
• Shortcomings in socialization	6
• Tighter follow-up required for attendance in lessons	4
• Mobile application should be developed	3

When Table 3 is examined, it is seen that among the criticisms of the participants about the existing distance education systems, the discipline-related problems, lack of interaction, the complex structure of the system and the absence of live lessons were prominent. Under this heading, almost all of the participants in BAUN and SU who did not use the Microsoft Teams application found their current systems complicated and regarded lack of live lessons as a major deficiency. In relation to this, the participant coded as BAUN4 said "*The distance education system was so complicated that we spent a lot of time to understand it, and even there was no live lesson…"*, while another participant coded as SU2 said "*Lack of live lessons caused me to feel that the students were not getting complete education"*. Similarly, almost all of these participants emphasized the lack of interaction in their existing systems. Under the heading of interaction, the participant BAUN3 stated that "*only homework and pdf resources are uploaded to the distance education system, and unfortunately, there is no tool to provide the interactions we normally have with our teachers in face-to-face education ...*" Unlike other university participants, the participants from IDU and COMU using the application of Microsoft Teams did not criticize the system in relation to its complexity. The participants in this group mostly criticized disciplinary problems and some technical problems. The participant IDU1 said "*Teams is a very nice program, and it offers everything we need. It was a great convenience for us to be able to watch the recorded live lessons*", while the participant COMU5 said "*Microsoft teams is an effective*

system in many respects. We could interact with the teachers, though not as much as in the classroom. The live lessons were very beneficial." Several questions were directed to the participants within the context of the infrastructure and support services of the existing distance education systems, and their responses are presented with the findings in Table 4.

Table 4: Infrastructure and Support Services in the Distance Education System

Themes	**Frequency (f)**
Readiness of the Distance Education System	
• Enough professional preparations have been made	15
• Not enough preparations have been made	12
• Not bad	5
Instructor Support	
• Via social media	10
• Via the existing distance education system	18
• Via e-mail	4
Socialization activities	
• Socializing activities are inadequate or absent	20
• Via socializing activities through webinars	8
• Via the discussion sections within the lesson structures	4

The findings in Table 4 were interpreted within the scope of the preparations for the distance education system, instructor support and socialization activities. First of all, the participants were asked to evaluate the preparations regarding the distance education system offered by their universities. More than half of the participants responded to this question as "not bad" and "inadequate preparations". When analyzed in terms of universities, all the BAUN participants stated that "*not enough preparation has been made*", while almost all the IDU and COMU participants agreed that the universities were professionally prepared in this process. In relation to this, the participant BAUN3 said "*The first day we entered the distance education system, the system had collapsed, and at times when we could enter, we could only see pdf files and assignments. Frankly, I am very sorry on behalf of my university …*", while the participant IDU7 said "*Thanks to the videos and explanations sent to us before the lessons started, we got integrated into the system very easily. The necessary explanations made were beneficial, and it was useful for us to use the system …*"

The IDU and COMU participants using Microsoft Teams stated that they could easily access instructor support through the existing system without any problem when they needed, while the BAUN and SU participants stated that they could access the faculty members via their social media accounts or e-mail. Under this heading, the participant BAUN7 said "*When we wanted to ask something to our teachers, we could access them via WhatsApp or email ...*". When the heading of socialization activities was examined, it was seen that more than half of the participants experienced problems in this regard.

The present study also examined the comparisons made with traditional education in most of the studies on distance education in literature. The participants were

asked to compare the distance education with the traditional education from various aspects, and the findings in Table 5 were obtained.

Table 5: Comparison with the Traditional Education

Themes	Frequency (f)
Comparison of motivation and performance	
Negative in terms of motivation	
• I can't feel like attending a school	16
• Discipline-related deficiencies	18
• Reduced interest and efforts	17
• Problems with instant feedback	20
Positive in terms of motivation	
• Fewer distractors	14
• Positive contribution of home comfort	17
Negative in terms of performance	
• I was negatively affected because my motivation was low	15
• I am badly affected by the psychological situation of staying home	20
Positive in terms of performance	
• My performance increased when the assessment was only via the homeworks	21
• My performance increased as a result of working comfortably at home	12
Advantages and disadvantages over traditional education	
Advantages	
• Providing access at any time and place	29
• Home comfort	17
• Ease of concentration	14
• Course records that can be watched again	16
• Difficulties in accessing school	13
• Increase in performance (homework evaluation)	20
Disadvantages	
• Problems with socialization	15
• Loss of motivation	16
• Interaction problems	12
• Discipline problems	10
• Feeling lonely as a result of feeling like not attending a school	11
• Not suitable for multi-channel use	4
• Lack of permanent learning	6

The participants' responses were mostly related to the variables of motivation and performance. Accordingly, the findings were presented as codes causing positive / negative perceptions in terms of the variables of motivation and performance. Among the factors that negatively affected the participants' motivation, the most frequent ones were "problems in instant feedback" and "deficiencies in discipline". In addition, not feeling like they were attending a school and the decrease in their interests and efforts were among the factors that negatively affected their motivation. In relation to this, the participant BAUN7 said "*to be honest, how can a person feel like a student in a system where teachers only upload pdfs? This makes me feel I am not part of a school, and I really don't want to do anything more …*", while another participant, IDU2, who used Microsoft Teams, said:

"*Live lessons are really nice. We can reach the teachers whenever we want, but sometimes there could naturally be discipline-related problems because there is no real classroom environment, and this is all about how the teacher manages the lesson …"*

The participants who thought that it contributed positively in terms of motivation regarded "home comfort" and "fewer distractors" as the main causes of their thought. In relation to this, the participant COMU4 said "*This method is very suitable for my way of working, I study comfortably at home, and things that may normally confuse me in classroom do not exist at home."*

When the responses of the participants were examined in terms of the variable of performance, the factors that led to their positive and negative contribution were examined. Those who stated that they made a positive contribution generally emphasized the advantages of working comfortably at home and being evaluated through homework. One of the participants, COMU1, said "*I have the opportunity to work comfortably at home; otherwise, you have to get ready for school, and in this way, I get rid of a lot of trouble*", while another participant, IDU3, said "*absence of traditional exams during the pandemic period really reduced the pressure on me. Assessment with homework was obviously useful for me.*" In addition, the participants who said that it caused a negative effect on performance focused on the headings of loss of motivation and negative psychological situations caused by staying at home. In relation to this, the participant BAUN2 said *"… when I think of the previous period, I feel that I have moved mentally away from school. My psychology is badly affected because I cannot see the faces of my teachers or friends."*

The participants in the study were asked questions regarding what their concerns were before the academic term, and the findings in Table 6 were obtained. It was seen that the participants were generally anxious before this process, which they experienced for the first time in their lives. Among these concerns, the prominent ones can be listed as follows:

Table 6: Before and after the process

Themes	**Frequency (f)**
Concerns before the process	
• It will be a difficult process	25
• Concerns about its efficiency	27
• There will be no active participation in classes	30
• The way of evaluation	30
• Issues of timing and how lessons will be handled	28
• Infrastructure deficiencies (internet, computer, etc.)	4
• Their success in courses will decrease	6
• I didn't have any worries	2
Changes by the end of the academic term	
• My motivation decreased because my expectations were not met	13
• Insufficient resources uploaded in the system in most courses affected me negatively	11
• I saw that home comfort is not that good	12
• I saw that the lecturers were not interested enough	8
• The lessons were not productive enough for me	10
• My worries are out of place	15

The least important concerns in the list in Table 6 were about the lack of infrastructure and the probable issue that the course success would decrease. The participant IDU6 said "*When I first heard that this period would be taught via distance education, I had a lot of worries in my mind, such as how the lessons will be taught, where the exams will be conducted. But afterwards, our university made announcements answering all these questions, which relieved us …*", while another participant, BAUN1, said "*We had a lot of concerns at the beginning of the process. We could not get answers to our questions we directed to the authorities. Honestly, this process was very complicated and difficult for us.*"

At the end of the term, the participants were asked to what extent these concerns were resolved and what the changes they had experienced were. Almost half of them stated that their various concerns before the period were out of place. The participant, IDU11, said "*to tell the truth, at the beginning of the term, I thought it would be a difficult period, and I had a lot of uncertainties in my mind. With the start of the academic term, we got used to the distance education system and spent the lessons as efficiently as possible …*" It was seen that the participants who did not use MT software were negatively affected in terms of motivation, communication with instructors and efficiency in the lessons. In relation to this, the participant BAUN6 said "*We have seen that distance education really does not work. We were expected to learn the lessons with the pdfs uploaded on the system, yet it was not efficient for us at all …*". Besides, the participant BAUN5 said "*We had trouble reaching the teachers, the system was not working properly and it was very complex. To what extent were the pdfs uploaded on the system sufficient to understand the lessons? This is really open to discussion …*". It was another important finding that very few concerns of the participants who used MT software were not removed.

Within the framework of the Theory of Uses and Gratifications theory, the participants were asked for their views about the positive aspects of the distance education process and about whether they were gratified or not, and the findings in Table 7 were obtained. At the same time, their views about the spread of distance education processes, which is an innovation within the framework of the Diffusion of Innovations Theory, are also included in Table 7.

Table 7: Gratifications and Diffusion Regarding the Distance Education Process

Themes	**Frequency(f)**
Positive aspects of the process	
• Providing the opportunity for flexible working	15
• Recording the courses	17
• Convenience of working in a home environment	17
• Education is not interrupted	10
• Not having to go to school	12
• I don't think it has a positive aspect	10
Quality of the education given	
I was satisfied because …	
• I was in comfort at home	12
• It was useful to watch the lecture records again and again	17

I was not satisfied because …	
• We used a sloppy distance education system	10
• The resources uploaded on the system were insufficient	8
• There was no interaction	12
• I lost my motivation	14
I am neutral because …	
• Permanence is more in face-to-face education	4
• It was not suitable for all classes	3
Dissemination	
• If there will be live lessons, they should be widespread	28
• I don't think it will be beneficial if it becomes widespread	3
• If a very good infrastructure and distance education system can be developed, it should be widespread.	19
• It should not become widespread as it is not suitable for all courses.	3

Although the participants were asked to explain the positive features of the distance education process considering all the aspects of the distance education process, the participants reported that they thought there was almost no positive aspect of the system. The participant BAUN3 said "*I want this period to end as soon as possible and the pandemic process to finish. I had a period as if I had never gone through a real education process. It would not have occurred to me that I would miss the traditional education so much*", while the participant SU2 said "*For me, this period was not productive. I cannot see any positive side.*" It was seen that all of these participants were from the universities of BAUN and SU. Apart from this answer, when the positive features were listed, issues such as the recording of the lessons and the comfort of the home environment were found prominent. The participant IDU5 said "*It is very good that all courses are recorded. We watched it again when there was something we could not understand. Normally we wouldn't have done that in the classroom.*" These findings were followed by the opportunity for flexible working, which is one of the basic features of distance education.

The participants were asked to evaluate the quality of the education given during the pandemic process under 3 headings: satisfied, dissatisfied, and indecisive. As in the findings obtained in relation to the positive aspects of the process, the participants who said they were satisfied pointed to watching the recorded lessons again and again and to studying in comfort at home. The participants who said they were dissatisfied reported the reasons for their dissatisfaction to include the sloppy preparations for distance education systems, insufficient resources uploaded onto the system and interaction issues. In addition to the participants who expressed positive and negative views, it was seen that there were some participants who were indecisive. These participants expressed their reservations about some issues such as the probability that distance education would not give the same results in all lessons and that traditional education would be more permanent.

Considering the fact that the distance education in the pandemic process is an innovation, the participants were asked for their views about the dissemination of this education process they had experienced. In the study, the majority of the participants

expressed views supporting the spread of such activities. The participants reporting this view generally stated that it would be beneficial under certain conditions. The participant IDU2 said "*it may not be suitable for all courses, but I think it should become widespread*", while another participant, COMU3, said "*if there will be live lessons, it should become widespread …*" Contrary to these views, it was seen that the students who were not satisfied with the quality of education during the pandemic process were pessimistic about this issue. The participant BAUN4 said "*If there will be education like the one this period, I think it is better if it does not spread. I was really off the school, it was a term I spent only with pdfs …*"

Apart from the data in Table 7, the participants were asked whether they understood the lessons / subjects sufficiently at the end of the academic term they spent with distance education, and a little more than half of the students answered this question saying "I don't think I understood". The other answers were "partially" and "I have understood enough", respectively. The answers given to this question on the basis of the universities could be summarized as follows: In this study, almost all of the participants from Balıkesir University said "I don't think I understood", and a similar situation was also true for the participants from Sinop University. A number of participants from the universities that used MT said "I have understood enough".

6. Conclusions, Discussion and Suggestions

This study was carried out with a total of 32 participants from 4 different universities in order to generally evaluate the distance education they received during the pandemic process. According to the findings obtained in the study, it was possible to categorize the results as those using MT and those not using MT. The questions directed to the participants were prepared within the framework of the general dimensions of distance education and the theoretical foundations of theories of Diffusion of Innovations and Uses and Gratifications, which constituted the theoretical foundations of the present study, and the findings were interpreted accordingly.

When the tools used in distance education were examined on the basis of universities, it was seen that BAUN was the university that offered the least tools to its students, while ÇOMU and IDU offered all distance education tools to its students. Considering all the dimensions of distance education together, it could be stated that the universities providing their students with a number of tools conduct this process more professionally. According to the ranking of universities by UAR (Karadağ & Yücel, 2020), the fact that COMU is in the second place also supports these findings considerably. The participants were asked to evaluate the existing distance education systems of their universities, and the findings revealed that there were those using MT and those not. In general, the most important criticism among all the participants was related to the disciplinary problems such as complacency and frivolity, which was followed by lack of interaction. Especially complacency was examined and emphasized in many studies as an element that needs attention (Alexander et al., 2012; Durak & Ataizi, 2016; Roseth et al., 2011).

The complexity of distance education systems was regarded by the BAUN and SU participants as a serious problem. Looking at the distance education systems of these universities, it was seen that Moodle was used especially in BAUN. Considering the design and complex structure of Moodle, which has almost the same features since 2002, this result obtained in the study was not surprising. On the contrary, it was revealed that the university participants using MT found their systems useful. It is important to develop these softwares used by the participants so that a healthy learner-interface interaction can be achieved (Hillman, Willis, & Gunawardena, 1994).

While live lessons should be an indispensable part of distance education, these live lessons were not required by BAUN and SU. While the participants of these universities saw this as a major deficiency, they suggested that live courses should be made compulsory for the system. Live lessons are a kind of sharing created by Simonson's theory of equality. In his equality theory, Simonson stated that the more equal the learning experiences of distance learners are to the learning experiences of face-to-face learners, the more equal their learning outcomes will be (Simonson, Schlosser, & Hanson, 1999). Therefore, if learners can be offered equal learning experiences, it could be stated that what they have learned will be expected to be equivalent. When the participants in IDU and COMU were asked about the positive aspects of this situation, where live lessons are compulsory, they primarily stated that the MT software they used was a whole software that offered many environments together. It could be stated that one of the important points that institutions offering distance education should pay attention to is to use integrated systems. When users have to use one software for live lessons, another software for resource sharing and yet another one for communication, this will make the education process difficult for them. It could also be stated that the IDU and COMU participants were pleased to use an integrated system and that they found it very useful to watch video-recorded lessons over and over again. As a support to these findings, Durak and Ataizi (2016), in his study, reports that students favor the platforms involving a number of environments. In addition to all these positive features, it was seen that negative situations, though few in number, were expressed by the participants.

The IDU and COMU participants made some criticisms regarding some deficiencies in the MT software in terms of socialization and strict follow-up of attendance issues. However, the fact that these criticisms are not directly related to MT software but are actually under the responsibility of lecturers is an important issue to be addressed. Attendance in lectures has emerged as an important issue to be considered in many studies in related literature (Dutton, Dutton, & Perry, 1999; Jaggars, 2011; Lorenzetti, 2002; Xu & Yuan & Powell, 2013). In the study conducted by Durak (2014), a high level of relationship was found between online learners' levels of attendance and their success scores. It is seen that the opinions of the participants about whether their universities were prepared enough for their distance education systems in the pandemic period support the findings above. Especially the BAUN participants agreed that their universities were not professionally prepared enough. This result could be said to be expected considering the complex structure of the Moodle system, the limited number of

distance education tools they offer to students, and the connection problems experienced. It was revealed that the university participants using MT were able to communicate with the academic staff through the system, while other university participants had to use tools such as social media or e-mail. Providing learner-teacher interaction, which is an element of the interaction dimension among all the dimensions of distance education, will be an important factor that will make learners satisfied in this regard.

It was concluded that the positive effects of this process on the motivation of the learners were due to the comfort of the home environment and the lack of distractors. The comfort of home environment was another positive result in terms of the variable of performance. However, among the negative effects, lack of discipline was considered to be related to the comfort of the home environment. The comfort of the home environment was found positive in one respect, while it was also criticized as it might lead to complacency. From this point of view, it could be concluded that the comfort in home environment will be evaluated within the scope of space flexibility, which is the main feature of distance education (Johnson et al., 2011; Sun et al., 2008), and that the limits of this flexibility should be determined well. It was revealed that the problems with the instant feedback also affected the motivation negatively, and it could be stated that all the participants felt as if they were not really attending a school. In addition, the negative situations related to motivation also affected the performance. These results are supported with the views in literature that learners may think that they are struggling in vain when they cannot get feedback in a short time and that they may lose their motivation to learn (Molotsi, 2020; Şener et al., 2020; Tolu, 2010). Similarly, in one study, it is reported that when timely feedback is not given in distance education, there is a decrease in learners' connection and engagement with each other and with the school (Stephen, O'Connell, and Hall, 2008).

Unfortunately, it is not desirable that what is considered positive in terms of performance is to be evaluated through homework. Despite the pandemic process, it could still be stated that there are deficiencies in the assessment dimension. It is important to use good-quality and diverse assessment tools. It was revealed that one of the factors that negatively affected performance was the psychological state caused by staying at home. This result is seen to be parallel to the results of the study conducted in the Arab world in literature. In the related study, it was reported that staying at home led to stress, anxiety and depression and had negative influence on the teaching process (Al Lily et al., 2020).

One of the most frequently encountered situations in distance education studies is that it is compared with traditional education. In the literature, a number of studies have been conducted in this field. In some of these studies, there was a difference in favor of distance education (Wilson & Allen, 2011; Watters & Robertson, 2009; Köse et al., 2013; Feintuch, 2010); there was a difference in favor of traditional education in some other studies or no difference in other studies (Zhao et al., 2005; Huh et al., 2008; Rich & Dereshiwsky, 2011; Roseth et al., 2011). The basic flexibility of distance education was regarded as an advantage over traditional education in this study. The features

considered to be negative included socialization, interaction and other known limitations of distance education. The periods before and after this educational process during the pandemic period were evaluated by the participants in various respects. It was seen that the expected situations before the pandemic period included being a difficult process, productivity concerns, how to participate in the lessons, and most importantly, how the assessment would be. These concerns might be considered reasonable for participants who have not experienced such a process before. It was an important finding that among the changes experienced at the end of the period, most of the concerns of the participants using MT were unfounded. However, most of the other participants experienced difficulties in losing motivation, complacency, low level of interaction and efficiency. When these results are evaluated together, it could be stated that using an integrated software like MT will positively affect motivation thanks to the decrease in the feeling of complacency, obligatory and more efficient lessons and especially interaction. The finding that use of an integrated software can produce more beneficial results is also supported by the related literature (Durak, 2014).

In the last part of the study, the participants were asked for their views about the quality of the distance education provided during the pandemic process. Similar to the other results obtained in the study, the IDU and COMU participants using the integrated system were satisfied, while almost all of the BAUN and SU participants were not. This situation also indicates whether the learners are satisfied or not. Almost all of the participants stipulated live lessons for the dissemination of distance education applications. In addition, they agreed on the need for a very good infrastructure. The fact that the university participants using an integrated system agreed on the dissemination of distance education activities could be explained with the theory of Diffusion of Innovations. The participants' lack of previous online learning experiences caused them to perceive online learning as an innovation. Considering the fact that the participants were satisfied with the distance education activities they have experienced and that they found it useful, it is seen that they adopted the innovation. Finally, the participants' thoughts that the spread of distance education activities would be beneficial for the society; that such applications should be implemented in higher education; that they recommended these applications to their friends who did not experience them before; that these applications would be indispensable in future could be attributed to the spread of this innovation. In terms of the theory of Uses and Gratifications, the comfort of the home environment and viewing the recorded lessons were among the factors that the participants were satisfied with. This situation is related to the flexibility offered by distance education. In relation to the factors that the participants were not satisfied with, it was seen that loss of motivation and lack of interaction mentioned by the BAUN and SU participants who did not use an integrated system were prominent. These reasons are reported in related literature to be among the limitations of distance education.

6.1 Suggestions

Within the scope of the study, the suggestions are gathered in three groups: for researchers, for administrators, and for teachers. These suggestions are intended to guide future research as well as to provide educational institutions with constructive views about distance education systems during the pandemic process.

Suggestions for researchers:

- This study was carried out at 4 different universities in line with the opportunities available. Such studies could be conducted including more universities.
- This study covered the first academic term in the pandemic process. Future studies could cover a longer time period and focus on the changes in the views of students and universities.
- In this study, the participants were reached through interview questions for in-depth examination of the research topic. Using quantitative methods, studies that measure such parameters as motivation, satisfaction and social welfare and compare universities in this respect could be conducted with a wider group of participants.

Suggestions for administrators:

- It was revealed that the integrated systems were not preferred in Balıkesir and Sinop universities, which were among the universities included in this study, and it was seen that the students made a lot of criticisms about this issue. It will be better for the quality of education if these two universities along with all other non-user universities make use of integrated systems like MT, in which live courses can be integrated.
- The results obtained in this study revealed the need for carrying out distance education activities in an attentive and planned manner. Institutional administrators are recommended to ask for the opinions of their students and lecturers in order to have and manage a healthy process.
- It is important for the "user-friendly" principle that the distance education system to be used by institutions should be simple and easy to use.
- Institution administrators are recommended to be concerned not only with educational goals but also with the social support dimension.
- Appointing people specialized in the field of distance education to the head of the related units will allow distance education to be conducted more beneficially in terms of theory and practice.
- It is important that administrators should conduct an infrastructure and technical analysis for all their students before the education process, and accordingly, identify the deficient equipment and infrastructure needs of their students.
- It is recommended that institution administrators improve their distance education systems further with respect to support services.

Suggestions for teachers:

- Teachers should pay attention to the instant feedback mechanism, which is considered to be among the limitations of distance education.

- Teachers' interest not only in the educational goals but also in the social support dimension in their lessons will allow the process to be more beneficial for students.
- Teachers should work on more creative and more original methods of assessment. In this way, they can increase the reliability of the assessment dimension.
- Teachers should give live lessons as much as possible, and besides, they should also make use of instructional tools that provide various opportunities such as course resources, announcements, assignments and discussion opportunities through the asynchronous platform.

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