

Student Opinions on the Assessment and Evaluation Applications Performed During the Covid 19 Pandemic in Higher Education*

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Abstract. With the COVID-19 pandemic, new experiences have begun to be experienced globally in many sectors in the world and in Turkey. The COVID-19 pandemic, which affects every field, has brought new applications especially in education. In higher education, there have been changes in the teaching, measurement and evaluation practices with the emergency distance education process. In this study, students' views on measurement and evaluation applied in the emergency distance education process in higher education were examined. The aim of this research, which was conducted within this framework, is to examine the opinions of the senior students of the education faculty regarding the measurement and evaluation practices in the emergency distance education process during COVID-19. Within the scope of this study, which was approved by the ethics committee, the opinions of 40 education faculty senior students were collected through an open-ended questionnaire. In addition, nine volunteers from the students participating in the research were interviewed. The collected data were analyzed through the MAXQDA-2020 qualitative data analysis program. As a result of the analyzes made, six themes were determined regarding measurement and evaluation, including obstacles encountered, exam applications, homework applications, general success status, preferences regarding measurement and evaluation tools, and suggestions for measurement and evaluation applications. While the students mainly emphasized cheating in measurement and evaluation practices in the distance education process, they emphasized the use of homework in the evaluation of student success. In line with these results, suggestions were made to researchers and policy makers.

Keywords: COVID-19, emergency distance education, measurement and evaluation, higher education, prospective teachers.

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1. INTRODUCTION

Throughout history, people have struggled with epidemics from time to time. COVID-19, which started in Wuhan, the capital of the Hubei region of China in December 2019, affected the whole world in a short time and was declared an epidemic by the World Health Organization of the United Nations on March 11, took its place in history as one of the epidemic diseases. With the spread of COVID-19 all over the world, emergency distance education applications have been activated in other countries and in Turkey in order to continue education without interruption. Emergency distance education is defined as a sudden transition from face-to-face education to online education as a result of a major disaster. In other words, it is the presentation of curriculum and training materials that would normally be given face-to-face with distance education tools (Hodges et al., 2020; Mohmmmed et al., 2020). In distance education, theoretical and practical knowledge specific to the field are maintained with planned and systematic activities for a specific purpose, while in urgent distance education, education is tried to be maintained with the available opportunities in time of crisis (Bozkurt, 2020). During this transition period, many teachers had to move their course content online (Bozkurt, 2020; Trust & Whalen, 2020). In Turkey, the Ministry of National Education has taken important steps for the transformation of courses into distance education by making the Education Informatics Network (EBA) more active and cooperating with the Turkish Radio and Television Corporation (TRT) in 2012 (Karahana, Bozan, Akçay, 2020). At the university level, as a result of some studies carried out by the Higher Education Council (YÖK), 123 universities have UZEM (Distance Education Application and Research Center) and they are all sufficient for the distance education systems to continue the education-training period and YÖK has also announced that the needs of universities that lack infrastructure would be met in cooperation with other universities under the coordination of YÖK (YÖK, 2020). In addition to these decisions, YÖK stated that the process should be continued in accordance with the academic calendars of universities and measurement and evaluation processes should be carried out at the end of the process. Due to the forced transition from normal classroom environments to online classroom environments overnight, the main concern in educational institutions was not the quality of education, but the continuation of education without interruption in line with the opportunities available (Saltürk & Güngör, 2020). Distance education has advantages such as creating equal opportunities in education, providing different learning environments, flexibility in measurement tools, and providing greater use of technological opportunities (Bilgiç-Doğan, 2014). Although there are many successful and unsuccessful applications in the emergency and distance education process, the biggest controversy and problem has occurred in measurement and evaluation applications (Elsalem, et al., 2021, Bozkurt, 2020). Many countries have had to switch to online exam practices along with emergency and distance education. However, another problem is that almost the entire educational process is structured with results-oriented measurement and evaluation approaches, and process-oriented measurement and evaluation approaches are not adequately used (Yalçın, Sağlam & Akar, 2021). In this

context, how the measurement and evaluation practices are carried out in the emergency distance education process, which started with a sudden transition and necessity, and what the problems are perceived by the students are among the issues that people are curious about. Examining the measurement and evaluation practices in the emergency distance education process in Turkey is important in terms of the integration of the process with technology, the development of objective measurement and evaluation practices, and the shaping of students' expectations. This new situation, which has emerged all over the world, has brought new perspectives in the implementation and execution of the education process. The pandemic has revealed the competence of universities in the Turkish higher education process, such as the management of distance education, digital tools and technical infrastructure adequacy, and the adequacy of teaching staff, to the public at first hand (Karadağ & Yücel, 2020). In this changing process, besides the distance education and training, how the measurement and evaluation practices made within the framework of the e-platform are carried out, what the deficiencies are, should be determined and necessary studies should be carried out.

While the effects of the pandemic continue to manifest itself, it is important to determine the opinions of university students on measurement and evaluation practices in this process, and to reorganize measurement and evaluation practices in line with these opinions and to create solution proposals.

Accordingly, the research aimed to describe in depth the measurement and evaluation practices through the eyes of university students in the emergency distance education process that came with the COVID-19 pandemic. In this context, answers to the following questions were sought.

1. What are the positive and negative aspects of the measurement and evaluation practices applied during the COVID-19 process?
2. What kind of problems did you encounter in the process when you took the online exams and assignments?
 - a. How would you prefer the administered exams and assignments to be conducted?
 - b. What are your suggestions regarding the measurement and evaluation methods to be applied in the following periods?
3. If you compare Distance Education and Formal Education applications in terms of measurement and evaluation applications, what would you say?
4. What effect did the measurement and evaluation practices applied in distance education have on your overall success?

2. METHOD

This study is a single case study designed in line with qualitative research approaches. In case studies, it is essential to examine and describe an identifiable phenomenon in all details within these limits, which can be limited to certain parameters such as a specific time and place (Merriam, 2013). Since the situation investigated in this study was determined as the opinions of the university senior students of the faculty of education regarding the measurement and evaluation practices during the pandemic process, the instrumental single-case design was preferred.

Participants

The participants of the study consisted of 40 volunteer students studying in the fourth grade in different undergraduate programs (PDR, 11; Special Education Teaching, 8; Classroom Teaching, 7, Art Teaching, 5; Music Teaching, 4; Physical Education Teaching 5) at the education faculty of a university. Case typical case sampling was used as the sampling method of the study. In typical case sampling, it is essential to select cases that are likely to be encountered within the scope of the existing diversity (Yıldırım & Şimşek, 2006). In order to keep the identities of the participants confidential, the participants were coded as P1, P2, P3.

Data Collection Tools

The data collection tools of the study consist of open-ended questionnaires and semi-structured interviews. In order to determine the opinions of university students, a measurement tool consisting of four open-ended questions and probes was prepared by the researchers. Open-ended question forms were prepared by three researchers by discussing them in the light of the relevant literature. The questionnaire consisting of open-ended questions was given to two field experts and the questions were finalized based on their feedback. Then, each researcher made a preliminary application by interviewing a pre-service teacher in order to determine whether these questions were clear and understandable. A field expert, together with the researchers, examined the results of the pre-application in order to determine whether the questions were clear and understandable, and whether the answers reflected the answers to the questions asked. Thus, the finalized open-ended questions are:

1. What are the positive and negative aspects of the measurement and evaluation practices applied during the COVID-19 process?
2. What kind of problems did you encounter in the process when you took the online exams and assignments?
 - a. How would you prefer the administered exams and assignments to be conducted?
 - b. What are your suggestions regarding the measurement and evaluation methods to be applied in the following periods?

3. If you compare Distance Education and Formal Education applications in terms of measurement and evaluation applications, what would you say?
4. What effect did the measurement and evaluation practices applied in distance education have on your overall success?

Data Collection Process

The data collection process of the research was carried out in two stages. In the first stage, volunteer students who would participate in the study were asked to answer open-ended questions via e-mail. At this stage, 40 volunteer students participated in the study. Three weeks after the first stage was completed, the second stage was started. In the second stage, interviews were conducted with 9 volunteer students among the participants with a semi-structured interview form prepared based on the answers taken from the students to the open-ended question forms. While the content of the interview questions was similar to the open-ended questionnaire, it provided the opportunity to examine the experiences and evaluations of the participants in depth. While remote interviews were conducted with 9 students selected on a voluntary basis among 40 students, with the Zoom application, face-to-face interviews were held with 3 students within the framework of pandemic measures. In these interviews, questions were asked about the evaluations of the students regarding the assessment and evaluation practices in the distance education process, and each interview lasted approximately 25 minutes. The data obtained from the open-ended question forms were analyzed with the descriptive analysis method and themes were obtained. The codes obtained from the semi-structured interviews were also interpreted within the framework of the themes obtained in line with the purpose of the research. In this process, the MAXQDA 2020 qualitative data analysis program was used in the analysis of the data. In addition, in order to ensure the validity of the research, the data collection processes were described in detail and direct quotations from the participants were included in the findings. In addition, participant confirmation of the interviews was obtained from the participants. In terms of the reliability of the research, the obtained data were analyzed by three researchers separately in MAXQDA 2020, the results were compared and the consistency between the encoders was checked. Ethical approval was obtained from Trabzon University Social And Humanities Scientific Research and Publishing Ethics Committee with document number E-81614018-000-517 and dated 21.05.2021.

3. FINDINGS

The quotations obtained within the framework of the answers given to the semi-structured interview questions and open-ended questions in order to describe the experiences of the senior students, who continue their undergraduate education in different programs in the Faculty of Education, regarding the measurement and evaluation practices in emergency distance education during the pandemic process are

stated first under the themes, then under the categories and finally under the codes. The themes created within the scope of the study are presented in Figure 1.

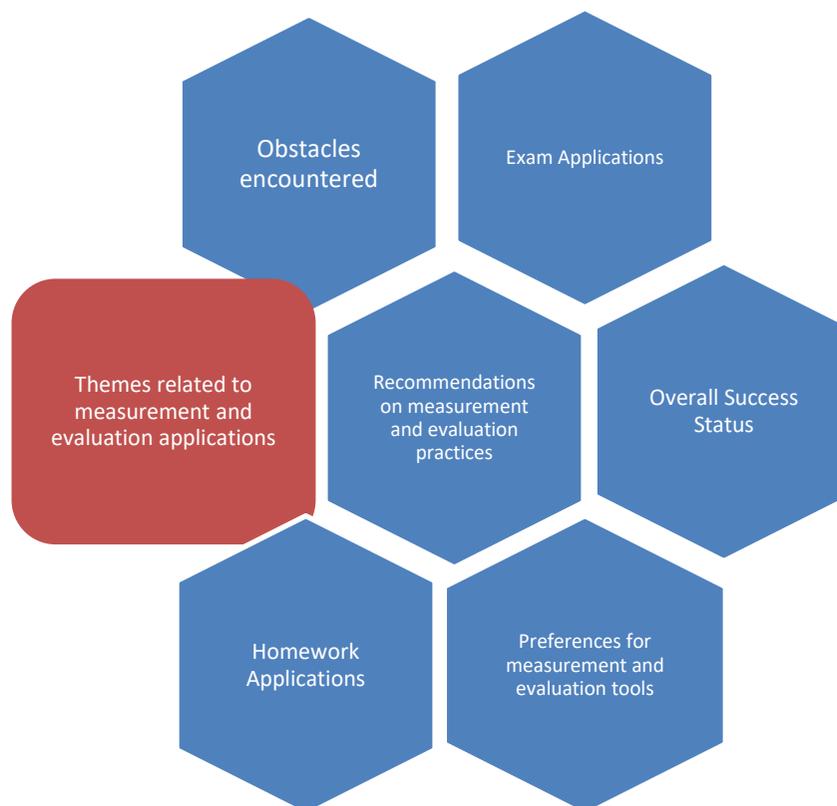


Figure 1. Themes obtained as a result of the study

Exam Applications

The students, who were interviewed and answered open-ended questions, mostly expressed the negativities they experienced while expressing their thoughts on online exams in the measurement and evaluation practices during the distance education process throughout the pandemic. At the beginning of these negativities, there were opinions that cheating behavior is high in online exams ($f=7$; 29%), the validity and reliability of the exams are low ($f=9$; 53%), and that they are not objective ($f=7$; 41%). In addition, very few students emphasized the positive aspects of the exams. However, some students stated that they found the exam practices objective ($f=2$; 11%). For example, P3 expressed this convenience as follows. "...We were able to easily access all kinds of information during the measurement and evaluation process..." P3

They also stated that they were concerned about the technical problems they might face in their exam practice, which panicked them ($f=8$; 44%). For example, the P3 coded student in the following example stated that the exams were more objective than the

assignments, while P8 expressed the possible failures that they may experience during the exam. *".....Although the online exam does not fully meet the need at some point, I think it is healthier than homework, closer to testing the current readiness, and healthier..."* P3

".....but when there is an exam, thoughts such as 'will there be a problem with the internet connection, will there be a knock on the door or will there be a glitch' causes us to make a negative start..." P8

In addition, the negative aspects of online exam applications were also emphasized. For example, below, students with codes P1 and P2 express the state of cheating experienced in exams, and also P24 stated that online exams are not a fair measurement tool due to their predisposition to cheating.

"... cheating events are negative features in online exams..." P1

"...When we say exam in distance education, the first thing that comes to mind is cheating. ..." P2

"...I think that the exams are not a very healthy and fair tool in this period, so I think that successful students who experience many impossibilities have lost their right..." P24

P14, on the other hand, stated that she had problems in answering and uploading the questions during the exam.

".....It is easy to access information in distance education in exams, but I had the difficulty of both evaluating the information, writing it on the computer or by hand, and uploading what we did to the system during this time..." P14

Another notable negative was the problems experienced regarding the assessment, including the exams (f=11; 48%). For example, P21 stated that she did not know the evaluation criteria in the exams.

".....I think it is a pity for the time I spend on my effort, since the teachers do not specify the criteria by which the exams are evaluated. ..." P21.

Homework Applications

While expressing their thoughts on homework in the measurement and evaluation practices applied in the distance education process during the pandemic process, the students emphasized the positive and negative aspects of on-line tasks. Giving too much homework (f=8; 35%), uploading homework to the system every week, unqualified content of tasks (f=5;22%) and giving too long homework (f=4;17%) are the most emphasized negative features. They stated that the fact that almost all of the teaching process was carried out on assignments created an obstacle to participation in the lessons, and they also stated that they had difficulties while preparing the assignments due to the fact that not every student had equal conditions (f=5; 29%). For example, students with the codes P4, P13 and P17 in the example below emphasized these negative aspects of homework. *"...the lessons were spent doing homework every week, I*

don't think it was productive at all because we did homework just by reading before we learned the lesson, we were left completely on our own and I didn't learn much ..." P4

"...We did our homework ourselves, yes, but we were accessible to every source of information. For this reason, we could not filter our own ideas and information clearly..." P13

"...Homework should not be given to give homework. I think that most students do their homework with the thought of getting rid of them..." P17

Another striking negative aspect of homework is the evaluation problems (f=11;48%). Especially in programs where practice courses are salient such as Physical Education Teaching and Art, it is noteworthy to express problems about how assignments are evaluated. P2, in particular, emphasized the evaluation criteria in this process.

"...We compulsorily take pictures of the application works I have done in my field and send them, but we do not know to what extent the instructor perceives this and scales it. We cannot be sure whether what is given and received is understood correctly." P2

"...If assessments and evaluations are done with homework, I think the teacher should definitely have a criterion. The student who does his homework by doing his best and the student who does the copy-paste method just because it is a research homework should be differentiated..." P2

In addition, the positive aspects of homework were also emphasized. The positive features that attract attention are that the homework is instructive (f=12;52%) and there are more permanent learnings (f=3;10%). In the example below, students with the code P1, P4 and P5 stated their positive thoughts about the instructive homework.

"...homework was more instructive for me, I really think I added something to myself" P1

"...I did homework during the midterm and had the opportunity to read many articles. Scientific research was a method that I actively used the synthesis and evaluation steps, it improved my interpretation capacity..." P4

"...I can say that it facilitates detailed and permanent learning with the homework given. ..." P5

The Obstacles Encountered

In the emergency distance education process, students stated that they faced many obstacles both in online exam applications, in homework applications and in accessing the course. Technological ownership situations, inequality of opportunity in access to education (f=8;29%) and technical problems were expressed as the most emphasized obstacles (f=25;89%). In particular, they noted that the fact that the authorities who designed this process acted on the condition that everyone had a technological infrastructure on equal terms reveals an unfair situation for them. For example, students with codes P2 and P3 in the following example expressed technical problems, while P20 indicated inequality of opportunity.

"...first, we need to know that not everyone is on equal terms in online exams. Many students live in villages and there is a problem of not having the internet or a line. Some may not even be able to take the exams. ..." P2

"...we generally have connection problems, this is a problem seen by everyone, unfortunately, when there is an infrastructure problem and insufficiency in general, we cannot break the wall of the house and connect to fiber. ..." P3

"...One of the biggest problems is the inequality of opportunity, which is still not possible today, that is, not every student has the same opportunities. ..." P20

In this process, especially students who do not have computers and technical facilities stated that they had to do exam applications and homework applications over their mobile phones, and this situation created a negative and unfair situation for them. For example, while P40 emphasized technological ownership, P39 expressed the problems experienced on the internet.

"...If I look at it from the point of view of my friends, a friend of mine in preschool failed three classes because he had an internet shortage and did not have a computer. This friend of mine normally has a very high average. There were such problems..." P40

"...Some of the students stay in their hometown, some in the village, some stay in rural areas with higher altitudes. Internet access may be a problem. Maybe the internet package of the students has expired. Students who do not have internet may have to use the internet of their family or close people around them, and the internet can be cut off during the exam. ..." P39.

Overall Success Status

While the majority of the students expressed the effects of the measurement and evaluation practices applied in the distance education process during the pandemic process on their general success, they stated that the success levels expressed by grades increased (f=18;62%), but their learning did not in this direction (f=7;24%). But they also expressed satisfaction that their overall academic grade point average had increased. Students with the code P1, P7 and P24 in the example below stated that their general success has increased.

"...The grades of all my friends and myself increased due to the fact that the system was very new last spring, the questions were easy thanks to the integrity of our teachers, and the wide time intervals given in the exams..." P1

"...My overall grade point average has improved. ..." P7

"...Compared to the general success level I had in formal education, I was more successful in measurement and evaluation practices in distance education, so my general success level increased. ..." P24

However, there were some students who stated that their learning level did not increase at the same rate despite the increase in their grade point average (f=2;7%). Students coded P16 and P28 expressed this as follows.

"...but this increase in grades is hardly in proportion to my knowledge and experience that I have learned ..." P16

"...But I don't think that learning has increased at the same level. ..." P28

Regarding the general achievement level, some students stated that this process had no effect on their general achievement levels (f=7;24%), while some students stated that their general achievement levels decreased (f=5;17%). For example, P9 and P32 stated that this process had no effect on their overall success status as follows.

"...Didn't affect my overall performance enough to notice the difference, either positively or negatively. ..." P9

"...I don't know on the overall success. I don't think the system has added much to me since I switched to this online system. So it didn't have an extra effect on my success..." P32

Few students stated that this process lowered their overall grade point average. For example, P10 and P31 stated that their general success status was negatively affected.

"...I don't think I got the grades I deserve and I think it lowered my overall success. Although I was successful in many courses, the scores given to me completely disappointed me. While my semester average was 3.95, my average decreased after the transition to distance education..." P10

"...Although I think that it contributes to the majority, I see a decrease in my grades compared to formal education. ..." P31

Preferences Regarding Measurement and Evaluation Tools

The students participating in the study mostly preferred homework in measurement and evaluation practices in distance education during the pandemic process (f=10;100%). For example, students coded P5, P4 and P25 expressed their preferences as follows. The participant 14 stated that the assignments are also presented orally during the lesson.

"...I think it is more appropriate for this process, at least in my own opinion, that the exams are done as homework and their duration is sufficient. ..." P5

"...exams are not effective, please give homework, let's read and search ..." P12

"...I think homework applications are a clearer assessment tool during the pandemic process. ..." P25

"...At the same time, I think we should not present these assignments in class..." P4

However, only one participant stated that how the assignments were done could not be controlled, so their preference could also be the exam.

"...I would like to have information about how to apply homework and exams and how students can upload them to the system. After gaining knowledge on these subjects, I can choose homework or an exam..." P24.

Suggestions on Measurement and Evaluation Practices

Participants made some suggestions for measurement and evaluation practices in distance education in line with their experiences during the pandemic. In this context, while emphasizing the importance of process evaluation (f=4;24%), it is often emphasized that the evaluation criteria should be objective in both homework and exam applications. In particular, it is recommended to use homework effectively in this process and to give feedback on homework. For example, participants coded P9, P27 emphasized assignments, while participants coded P2 emphasized the evaluation of the process.

"...In my opinion, unique projects to be given individually for different subjects are the only valid way for measurement and evaluation..." P9

"...it is beneficial to give as much analysis and research type assignments as possible and especially in reading-based assignments. ..." P27

"...I find it reasonable to evaluate students in process-based studies. I know that the teacher has a lot of work here... In my opinion, homework should be given completely depending on the process..." P2

In addition, students also made suggestions for online oral exams. For example, participants coded P10 and P3 expressed this as follows.

"...exams could be in the form of questions and answers on the system, so that those who attended the course and regularly listened to the course would be noticed. In this way, I think that measurement and evaluation will be more reliable and valid..." P10

"...You can have online interviews by finding a smart solution to the time constraint ..." P3

In addition, suggestions that online exams should be conducted in safer environments draw attention (f=2;12%). For example, they expressed their suggestions regarding the implementation of the P20 and P27 exams as follows.

"...Exams should be prepared in a way that prevents students from getting help from each other and should be done in a way that prevents the use of the internet..." P20

"...In my opinion, it would be more appropriate to take an exam with open-ended questions, especially in social sciences and linguistics. It is more difficult to prepare and implement, but it reduces the possibility of cheating to a lesser level and is useful in terms of developing and reinforcing the creativity of students ..." P27

4. DISCUSSION CONCLUSION AND RECOMMENDATIONS

The experiences and acquisitions of university students in higher education, who switched to emergency distance education applications with the pandemic process, were examined within the scope of this study. From the findings of the study, six themes were obtained: exam applications, homework applications, preferences for measurement and evaluation, obstacles encountered, general success status and suggestions for measurement and evaluation. The results are discussed within the framework of these six themes. In the transition to emergency distance education with COVID-19, measurement and evaluation applications have also started to be online. Özdoğan and Berkant (2020) stated in their studies on distance education that there is a lack of measurement and evaluation among the frequently expressed disadvantages. In this study conducted with university students attending different undergraduate programs, the majority of the participants especially emphasized cheating in their views on exams in the exam applications carried out on the e-platform in emergency distance education. They stated that e-exam applications are not objective and the biggest problem is the attempt to cheat. In the emergency distance education conducted in different countries, cheating is emphasized as the most common problem in online measurement and evaluation applications (Rahim, 2020). When the literature is examined, there are not many research results related to cheating behavior in online measurement and evaluation applications. Rowe (2004) stated in his study that 70% of high school seniors in the United States attempted to cheat. Online cheating behavior is more than traditional classroom cheating behavior. In fact, this situation is not due to the fact that it is easier to cheat in online measurement and evaluation applications, the most important deficiency here is the lack of human and software support as supervisors. Providing human and software supervisor support in online environments requires a very expensive investment (Rahim, 2020).

In the opinion of students about online homework applications, a large majority prefer homework as a method of measurement and evaluation. Homework is defined as individual or group physical or mental activities to make what is done in the course permanent and to increase their skills as well as their knowledge. Assignments have the function of completing learning and teaching activities in teaching. However, the related article also emphasizes the negative aspects of assignments such as haphazard work instead of benefit, making others do it, not being checked, and laziness, (Demirel cited from 1989, Yar -Yildirim, 2020). In online homework applications, the most mentioned point by the students is that there are too many homeworks, they are done randomly and they cannot get feedback on their homework. Homework has a very important place in both formal education applications and online learning environment. However, random assignment and neglect of homework, which is an important part of education and training activities, may harm students rather than benefit. Another important issue that the students emphasized about homework in this study is that homework is often copied. Serengil 2006, addressed this issue, and the university also stated that students

should pay attention to doing homework by copying. However, it is stated in the literature (Yar -Yıldırım, 2020, Ünal, Çakır & Ünal, 2019, Yıldırım & Sürücü, 2018, Duru & Çoğmen, 2017) that students prefer assignments that are evaluated as exam grades. Students stated that assignments provided them with many positive gains, improved their research skills and gave them the ability to work independently. In addition, students have stated that they enjoy research assignments that give them knowledge skills. In the study of Yar Yıldırım (October 2020), which investigated the views of university students on assignments, participants also reported negative views that their homework was not evaluated, they could not receive regular feedback from teachers, they could not interact regularly with the teacher who gave the assignment. Adıgüzel (2020) in his research with teachers on distance education applications stated that, according to the teachers, it can be used in the evaluation of student success in distance education applications if the homework is well structured and reliability is ensured.

Among the problems faced by the students in the research, it was stated that the most emphasized problems are both exam and homework applications, not having sufficient technological ownership in accessing the courses and not having an internet connection (Digital division). Another important problem is the lack of technology. Students 25 stated that they do not have personal computers and they have problems connecting from the phone. Similarly, Chung, Noo, and Mathew (2020) reported deficiencies in technological infrastructure as the biggest problem faced by 80% of students in their research on online assessment and evaluation and online learning practices they conducted within the framework of higher education in Sarawak/Malesya. 40% of the students stated that they do not have a personal computer and that they have problems in participating in online courses and assessment and evaluation applications because they live in rural areas.

Another important finding of the study is the increase in the academic achievement grade point average of the students. The education faculty students who participated in the study stated that "the success level expressed in grades has increased in general, but their learning is not in this direction". However, they stated that they were "satisfied with the increase in their overall academic grade point average". When the literature is examined, the results of this research show similar results with the research findings in which university students stated low satisfaction with the efficiency of learning during the COVID-19 period (Kolcu, Demir, & Kolcu, 2020). In addition, some of the students who participated in the research stated that it had no effect on their academic achievement levels, while a very few students stated that it had a negative effect on their general success. These findings of the research can be explained by the opinion in the literature that students who can work regularly and make their own plans are more successful at home during COVID-19 (Huber & Helm, 2020).

As a result of this study, if we evaluate online measurement and evaluation practices in general, the most common problem is academic fraud. However, many advantages can be mentioned, such as providing students with flexibility in terms of time, collecting data

more quickly, determining the results quickly, reducing the cost, and reducing the workload of the instructors such as printing and distributing the questions and collecting the results (Balta & Türel, 2013). Another result of this research is the lack of technology in the literature, which is conceptualized as digital division (Erten, 2019). Families with economic deprivation in accessing distance education have difficulties in accessing the necessary equipment for internet and distance education (Daniel, 2020). In this case, it can be said that students who are economically and environmentally disadvantaged have problems in accessing courses and participating in measurement and evaluation practices in emergency distance education. Although resources such as the internet and computers that provide distance education are accessible to students, it is also important to prevent social divisions and to ensure that measurement and evaluation practices can be carried out in a healthy way and for equality of opportunity (Özdoğan & Berkant, 2019). Another important result of this study is

In the process of online assessment and evaluation applications, there is an increase in the general understanding in the academic achievement grade point averages of the students. Examining the study habits of the students will provide a more detailed understanding of the issue.

The importance of gaining learning competencies to individuals and using technology for teaching purposes (Demirli, 2007) has become even more important and prioritized in emergency distance education applications with the COVID-19 pandemic process. Online teaching and learning also include different approaches, and the measurements and evaluations that will be made also differ from the usual. Balta and Türel (2013) emphasized that continuous evaluation in online education is very important in terms of feedback, control of the learning rate that differs from student to student, and the quality of learning that will be achieved at the end of the evaluation process. As a result of the study, among the students' recommendations for online measurement and evaluation practices, it was mainly recommended to use assignments for evaluation. It is recommended to use performance-based assessment methods, while oral exams can also be used as an online assessment method. From this point of view, it is recommended that learning in online measurement and evaluation applications within the framework of research results be reinforced with assignments and performance-based evaluations and that process evaluation be given weight. Barbosa and Garcia (2005) recommend that faculty members create a documented and consistent evaluation system process to improve the quality of the evaluation process in online learning applications. Also, having an online evaluation database as part of the test is one of the useful measures to prevent academic fraud. Another suggestion to prevent or minimize cheating is to conduct quizzes and open book exams. However, especially regarding homework, there are also reliability problems about whether the homework prepared by the student for the course is originally prepared by himself or not. In order to prevent this, receiving assignments in sections during the process and giving feedback can enable early detection of fraud. In addition, performance-oriented evaluations and

the use of rubrics can minimize cheating (Buzetta-Holleywood & Alade, 2006; Balta & Türel, 2013)

In this study, measurement and evaluation practices applied in the emergency distance education process were investigated. In the next period, it is envisaged that online teaching practices will continue in both National Education and Higher Education. Providing instructors with regular in-service training on developments in online assessment and evaluation practices can increase the quality of online assessment and assessment practices, and at the same time, regular communication with students, regular feedback to students about their homework, and frequent use of process assessment can be considered as quality-enhancing measures. Each of the themes that emerged in this research can be examined in depth separately, and the study can be repeated with larger sample groups including students studying at foundation universities.

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Statement of Contribution of Researchers to the Article:

Yurdagül Günel planned and modeled the study. Zehra Nesrin Birol co-wrote the paper with Ebru Unay who were involved in the collection of the data. Yurdagül Günel performed the data analysis of the study and contributed to the interpretation of the results. Zehra Nesrin Birol also contributed to the literature review and discussion section.

Conflict of Interest Statement

There is no conflict of interest.

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