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University Students' First Online Exam Experience: Is It Stressful or Joyful?

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Abstract

Objectives: The purpose of this study is to determine university students' views on online exams during the pandemic. The study was carried out with the participation of 15 undergraduate students studying at an engineering university in Azerbaijan.

Methods: Interpretive phenomenology guided the study. Data were collected through semi-structured interviews and analyzed using content analysis.

Results: Research findings showed that students experienced various problems in the online exam process. The inability to solve the technical problems encountered during exams and the perception that the instructors did not have sufficient knowledge about the conduct of the online exams made it difficult for the exam process to be carried out effectively.

Conclusion: Research results indicated that students who are taking their first online exam bring attention to both the positive and negative aspects of the process and discuss both the advantages and disadvantages of online exams in this context.

Implications: It is critical to develop infrastructure and train human resources at this point in order to easily adapt to different crisis situations that may arise in the future that require nontraditional assessment methods.

Keywords: *online examination, e-assessment in higher education, university students, COVID-19, Azerbaijan*

Introduction

COVID-19 caused significant changes and effects on all areas of social life globally, especially in the health, economy, and education sectors. With the spread of the epidemic, countries globally had to interrupt face-to-face education and continue their education processes online. Statistics, as of April 1, 2020, showed that schools were closed in 194 countries and approximately 1.6 billion students were affected (UNESCO, 2020a). Education systems globally faced various challenges during the transition. The United Nations *Universal Declaration of Human Rights* states that education is a fundamental human right. To ensure this right, countries have implemented emergency remote education practices to compensate for the interruption of education due to the pandemic.

After the first case in Azerbaijan emerged, on February 28, all educational institutions in the country were closed on March 2, 2020, to prevent the spread of the epidemic (Cabinet of Ministers, 2020). Thus, face-to-face education was suspended. The total number of students affected by the interruption of education due to the COVID-19 outbreak in Azerbaijan was 1,983,999 (UNESCO, 2020a).

In Azerbaijan, distance education was officially addressed on June 19, 2009, when the *Law on Education* was approved (Law of the Republic of Azerbaijan on Education, 2009). According to the 13th clause of the law, distance learning is defined as "a type of education where the teaching process is organized through electronic, telecommunications, software and technical tools" (p. 2). Although the concept of distance education is mentioned in the law, educational institutions in the country did not have sufficient infrastructure to implement this form of education. This lack of infrastructure created problems in educational institutions during the pandemic.

It was difficult to adapt to the sudden change, as higher education institutions in Azerbaijan were not designed to carry out online programs. Azerbaijani state has tried to take extraordinary measures to address the pandemic's impact on education on a national scale. The Ministry of Science and Education (MoE) made various regulations regarding schools and universities to ensure the maintenance of the education process without significant interruption. Universities tried to organize online courses voluntarily for a temporary period. Universities have organized courses on various online platforms based on the recommendations of the Ministry (MoE, 2020a).

The second semester of the 2019–2020 academic year was completed remotely with the help of various platforms and software such as Zoom, Microsoft Teams, and Google Classroom. MoE held various meetings together with the State Examining Center and the Public Council, which operates under the MoE. The rules regarding the organization of examination sessions in higher education institutions were discussed at these meetings (MoE, 2020a). As a result, universities made a joint decision to organize online exams (MoE, 2020b). The decision regarding the format of the exams (oral, written, project-based, etc.) was left to the universities.

In the information age, the scope of e-learning has gradually increased to provide knowledge and skills through computers, the internet, and telecommunication tools in many higher education institutions (Aly, 2011). As e-learning has increased, the use of online assessment has also become widespread. During the pandemic, the necessity for online learning and assessment has increased.

Literature Review

Assessment is an essential element in the education system to obtain information about the extent of learning outcomes (Alsadoon, 2017). When the internet and computer are used to measure success, this type of evaluation can be expressed as an online assessment. This type of assessment is characterized by various

names, such as online assessment (Dunn et al., 2003), e-assessment (Alruwais et al., 2018; Alsadoon, 2017; Sorensen, 2013), computer-based assessment (Marriot & Teoh, 2019), online evaluation (Donovan et al., 2007), and online course examination (Ramu & Arivoli, 2013). These terms are often used interchangeably. In our study, the related concept is expressed as an *online exam*.

There are a variety of forms of online assessment that support student learning. They can be classified as written assignments, online discussions, presentations, collaborative work, and essays; Joosten-Ten et al. (2007) listed them as projects, questionnaires, assignments, essays, quizzes, etc. Regardless of the exam type, all student assessment is carried out for the same purpose. However, there is no consensus among researchers about the effectiveness of online exams in evaluating student achievement. While some researchers draw attention to the advantages of online assessment (Alruwais et al., 2018; Shraim, 2019), others focus on the disadvantages (Alsadoon, 2017; Anderson et al., 2005; Kerka & Wonacott, 2000; Marriot & Teoh, 2019). The advantages and disadvantages of online student assessments are generally examined in three different ways: from the perspective of students, teachers, and institutions (Alsadoon, 2017; Alruwais et al., 2018; Yetgin, 2021).

According to Yetgin (2021), measurement and evaluation methods carried out through information communication technologies (ICTs) not only eliminate the need for paper and pencil but also reduce the cost and eliminate time and space limits. In addition, McCormack and Jones (1998) stated that online assessment has different advantages, such as saving time, instant feedback, and the ability to easily record evaluation records. Kuhtman (2004) expressed that online assessment's benefits are time and cost savings and quick reporting on the results. According to Karaman (2011) and Sorensen (2013), online assessments give students the advantage of taking the exam at the appropriate place and time, reducing exam duration, and speeding up the evaluation process. Additionally, online assessments facilitate the evaluation process, especially in classes with higher student numbers. Donovan et al. (2007) focused on the advantages of online assessments and stated that such type of assessments saves cost and staff time. One of the most important benefits of online assessment is that it provides instantaneous feedback (Dermo, 2009; Shraim, 2019; Sorensen, 2013). Ramu and Arivoli (2013) noted that online assessments could be held at any time and do not incur a higher cost than a traditional exam. According to the researchers, there is no need to print exam papers and organize exam centers for conducting online exams.

In contrast to these advantages, some researchers describe the disadvantages of online assessments. Marriott and Teoh (2019) evaluated computer-based assessment in terms of hardware and infrastructure and outlined potential issues that may hinder the use of assessment. Researchers cited these problems as time spent mastering software and other computing skills, some students having computer anxiety, and that computer-based assessment are not appropriate for longer and more complex questions. Anderson et al. (2005) stated that online assessments have several disadvantages, such as the requirement for students to have access to a computer, the need to understand technical information about computer use, and technical problems that may occur during use. According to Alsadoon (2017), since online assessments provide instructors with fewer control opportunities, it may be easier for students to cheat in the process. Students are worried about the technical problems they may experience during the online exam and the necessity of constantly looking at the computer screen may cause them to have concentration problems (Kerka & Wonacott, 2000). Based on what has been stated, it seems difficult to say that there is a consensus among researchers that online assessment used to evaluate academic achievement is an effective or ineffective method.

There are many studies on online assessment of student success in different countries (Adanir et al., 2020; Ali & Dmour, 2021; Cirakoglu & Ozbay, 2022; Guangul et al., 2020; Halaweh, 2021; Hussin et al., 2020; Shraim, 2019; Sudarso et al., 2021; Woldeab & Brothen, 2021). These studies have addressed various aspects of online assessment. For example, in a comparative study conducted by Adanir et al. (2020), perceptions of university students in Turkey and Kyrgyzstan regarding online exams were investigated. The findings of this research showed that student perception regarding the online exam differed statistically by gender and department.

Shraim (2019) studied the opinions of students studying at Palestine Technical University. Results showed that online exams provided more significant benefits compared to paper-based exams in terms of different factors, such as time and money spent on the exam process. Javaid et al. (2014) showed that students have good attitudes toward computer-based assessment, as well as various features, such as multimedia use, automatic grading, and personalized feedback.

Some studies also have focused on the difficulties encountered in the successful implementation of online exams. Guangul et al. (2020) studied the difficulties of remote assessment faced by students at a college in Oman. Research results showed that there are various difficulties in the online assessment process, such as academic dishonesty, and lack of infrastructure, such as computer labs. Hussin et al. (2020) investigated the challenging factors of online assessment practices in Malaysian higher education and noted them as communication barriers, network barriers, and reading problems. Sudarso et al. (2021) evaluated the effect of online exams on student anxiety during the pandemic period. Results showed that female students were more anxious than male students. Halaweh (2021) found that project-based learning assessment can be an effective alternative to online exams. Ocak and Karakus (2021) examined the views of 55 undergraduate students studying at two state universities in Turkey on online exams during the pandemic period. They found that the students mostly experienced various technical problems, such as internet connection issues, low motivation, and insufficient feedback. Cirakoglu and Ozbay (2022) also found that approximately 26% of the participants stated that they experienced power outages and resource problems, such as technical problems, computers, and the internet. Finally, Abdelrahim (2021) found that quarantining during COVID-19 increased student anxiety and stress levels, which in turn encouraged cheating. There were a variety of social, academic, and peer pressure factors that encouraged students to cheat in online exams.

Purpose of the Study and Research Questions

The emergence of COVID-19 made it necessary to conduct classes online at all levels of education in the country and to evaluate student achievement using information communication technologies (ICTs). During the pandemic, some universities in Azerbaijan carried out the exams mainly in the form of interviews, while some arranged multiple-choice tests, quizzes, and essays. Thus, it was deemed important to understand the online exam experience from the perspective of students. Although there are studies on the evaluation of student success through online exams in different countries, no study findings on this subject have been found in Azerbaijan. However, considering pre-pandemic education processes were not conducted remotely at any educational level in the country, and there was no experience in the online evaluation of student achievement, it was important to carry out such a study in the sample of Azerbaijani students. Thus, we sought answers to questions involving the first impressions of university students about online exams and the student's views regarding quality and transparency of online exams.

Methods

Research Design

We designed this study with a qualitative approach and analyzed the data by using the interpretative phenomenological method. In the interpretive phenomenological method, participants describe their experiences by making sense of their own perspectives and phenomenize their experiences (Smith, 2019). According to Smith and Osborn (2003), researchers interpret these phenomena by making sense of them in the context of the participants by establishing a cognitive and emotional bond with them.

Participants

We formed the study group by using purposive sampling and maximum diversity sampling techniques as criteria to increase the number of perspectives (Creswell, 2017, 2020). Our main criterion was to select students who had no previous online exam experience. The second criterion was to represent the diversity of different fields of education to interpret the online exam experience according to their field differences. In this context, we reached 15 students studying in various fields, such as chemistry teaching and chemistry engineering, civil engineering, biology and mathematics teaching, public administration, and information technologies.

Data Collection

We developed a semi-structured interview form to evaluate the perceptions of the process, quality, and transparency of online exams. In the development of the interview form, we examined the relevant literature in depth, and we created a draft interview form reflecting the focus of the research in coordination with two field experts. We revised this draft interview form again by incorporating feedback from three experts in the field of distance education and measurement and evaluation. Expert consultation resulted in three key questions. The questions were:

1. How do you evaluate your first online exam experience?
2. What do you think about the nature of the online exam?
3. What do you think about the transparency of the online exam?

We obtained permission from the Ethics Review Board of the university. We collected data from 15 students between July and August 2020 and conducted all interviews through the Zoom video conferencing service. First, we informed the students about the purpose of the study and that interview reports would only be used within the scope of the study. While conveying the expressions of the students, in the context of the confidentiality principle, we used coding instead of words that would reveal their identities.

Data Analysis

We first transcribed the audio recordings. We then sent the transcripts to the participants for their review and approval. Next, three researchers carefully reviewed transcripts and began content analysis. Each research question was analyzed separately, and themes were generated. During this stage of the process, the MAXQDA program was utilized. Codes from the concentrated topics, sub-themes from the codes, and themes from the sub-themes were determined by deciphering the opinions of the participants about each question.

Credibility and Trustworthiness Studies

We provided the credibility and trustworthiness of the research with various methods. The raw data of the study were analyzed by two different researchers. The consistency between these two analyzes confirmed that objective assessments were made of the research (Creswell, 2017). In addition, the findings of the study were read and checked by two different researchers from the field, apart from the authors. Thus, the findings were verified and made understandable by the readers.

Results

The findings are presented and analyzed within the framework of the three research questions, including (1) the online exam impressions of undergraduate students; (2) the quality of the online exam; and (3) the transparency of the online exam.

Online Exam Impressions of Students

Four themes emerged. These are the (1) advantages of the online exam; (2) disadvantages of the online exam; (3) effectiveness of online exams; and (4) reflections of online exams on education. Themes, subthemes, and codes are presented in Table 1.

Table 1. *Themes, Sub-Themes, and Codes Related to the Online Exam Impressions of Undergraduate Students*

Themes	Sub Themes	Codes
Advantages of online exam	Student union	
	Prevention of wasting time	
	Cost of education	Travel expenses, food, and shelter expenses
	Decrease in exam anxiety	Home convenience
		Time management
		Sufficient sleep
	Quick feedback	
	Inadequacy of the technological infrastructure	Power of technical infrastructure
		Lack of technological equipment
		Technical problems (stress)
		Internet access (internet speed, disconnection of the internet, participation problem, online loss, stress, additional time problems, etc.)
	Ethical issues	Giving questions to students
		Cheat/copy
		Not fair (scholarship competition)
The effectiveness of online exams	Accessibility to instructors	
	Postponement of the exam	Additional exam
	Measuring sensitivity	
	Inefficient	
	spatial needs	
Reflections of online exams on education	The increasing workload of instructors	
	Decrease in the quality of the lesson	
	Maximum convenience, minimum learning	

Undergraduate students find online exams advantageous in terms of preventing time loss, reducing the cost of education, reducing exam anxiety, and learning exam results quickly after the exam. Some statements on the subject are as follows: "The most important advantage in online exams was that we were at home and did not pay for travel because the university was far away (S10)." "Since I live so far from the university, online exams prevented the waste of time, and being at home helped me pass the exam in a stress-free environment (S3)."

"One of my favorite things about online exams was student collaboration. This experience, which we experienced for the first time, enabled us to help and cooperate with each other (S4)." Student S2 wrote:

> The best part of the online exam was that we were at home to take the exam. The results were announced very soon after the exam was over. My internet cut for a moment after the Multiculturalism course and then came back. But I can't really express how high the stress is at that moment.

Students also talked about the disadvantages of online exams. The first of these is the unpreparedness of the technological infrastructure. The strength of the technological infrastructure in Azerbaijan was found insufficient in terms of taking online courses and taking exams at universities. Universities could not provide any support to students, such as technological infrastructure, programs, technical tools, and equipment. Many technical problems, such as reduced internet speed, freezing, and internet interruption, during the exam, caused the students to experience stress. There are also many views on the stress, anxiety, and focus on the exam caused by the internet outage: "Even though my biggest desire was to study for my exam, I couldn't stop myself from thinking about the possibility of the internet going down (S2)." "The biggest challenge of the online exam was that the exam was postponed due to an internet problem. I was also extremely worried about the possibility of the internet and electricity being cut off (S3)." "The biggest problem was the internet. No matter how much our university professors told us they would help us, we were stressed (S8)." Student S9 wrote:

> Azerbaijan was not fully prepared. Online classes started in late April and exams were held in June. The effect of online courses was only 10%. Although instructors tried to teach 50% of the online course content, students only learned 10%. Instructors helped students who had technical problems and could not take the exam. Because they couldn't provide online learning, they felt indebted to the students. That's why there were instructors who compromised 100% in exams.

In online exams—besides ethical problems, such as instructors giving exam questions in advance—there are also ethical problems, such as cheating by students. It has been stated that students whose grades increase with cheating unfairly increase the competition for scholarships in universities. S14's statement on the subject conveys that "Online testing is not transparent at all. Some students have scholarship issues. So, there is a scholarship competition among students, and sometimes students want to use alternative ways to get into someone else's rights." According to Student S10:

> Traditional exams are under the supervision of instructors. There was no such thing in online exams, and if a student was aiming to cheat, there were thousands of ways. The traditional test had only a pen and paper. In the online exam, there were many different tools.

While the students talked about their first online exam experience, they also emphasized the effectiveness of the exam. These highlights are that the measurement sensitivity of online exams is lower than traditional exams, they are inefficient, and do not fully meet spatial needs. Student S9 wrote:

> Distance education is good. You are sitting at home and taking a lesson. But it is impossible to train an engineer online. Online courses are suitable for social science fields, such as history and similar, but not for science fields, such as engineering.

The views of students on the reflections of their online exam experience on education are also quite remarkable. They stated that online exams reduce the quality of the lessons because they provide maximum convenience, they do not have learning anxiety, and, therefore, they experience very minimal learning. They also stated that online exams increase the workload of instructors. "I care more about what I learn in traditional exams. I didn't learn much. Online exams are pretty easy, they don't require me to study (S1)." "If I

have a choice, I prefer traditional exams. I was preparing more for traditional exams. That's why I was learning more (S2)."

Quality of the Online Exam

Three themes emerged related to this question. They are (1) systemic professionalism; (2) effectiveness of the online exam; and (3) internet problems. We present themes, subthemes, and relevant codes pertinent to this theme in Table 2.

Table 2. *Themes, Sub-Themes, and Codes Related to the Quality of Online Exam*

Themes	Sub Themes	Codes
Systemic professionalism	Coordination problem	Instructor's competence
		Continuous testing of different exams
	Leadership of change	How university administrators manage change
	Time management	Pre-delivery of the exam schedule
		Enlightenment
		Preparing long exam questions
	Instructors' preparation	
The effectiveness of the online exam	Objectivity of evaluation	Copy/Cheat (Not fair, easy, exciting etc.)
		Lack of supervision (lack of opportunity, etc.)
		Giving questions ahead of time
	Areal differences	Social Sciences/Natural Sciences
	Learned information is not permanent	
	Inefficient	
Internet problems	Disconnection of the internet	Postponement of the exam
		Cancellation of the exam

Students emphasized systemic professionalism in their views on the quality of the online exam. There were coordination problems in online exams, which were reportedly due to the lack of instructor competency in exam coordination. They stated that the uncoordinated work of instructors also affected them, as well. S5 said, "Some instructors did not know how to use Zoom, how to take lessons and exams online." Additionally, there are also opinions that although instructors take responsibility, university administrators do not lead this change. Among these, the view of the S9 is remarkable:

> Overall, instructors took responsibility. If the people in charge of university administrators took a little more responsibility and this transition process seriously, students would learn something and online exams would then take on real meaning. However, university administrators did not lead enough in this change process.

Students noted that the instructors communicated the exam schedules to them in advance and that they managed the time correctly to provide the necessary information. Additionally, there are opinions that the length of the questions asked in the exam makes it difficult for students to manage time. Students stated that

the preparations of the instructors before the exam also affected the quality of this experience, and their success in technical preparations was due to their young age. Student S10 stated:

> Our instructors tried their best, but the quality was not very good. I think there was a lot of lack of professionalism because it was the first experience for the instructors, as well. The technical unpreparedness of the instructors also affected the quality of the online exam.

And S13:

> Since our instructors were young, they organized the exam in a quality way. The questions were sent to us from the Google document, we answered the questions. The questions were misled by the system, the instructor later corrected the questions by checking them alone. He also gave us quick feedback.

S15 stated that "the preparation and control of the proctors were insufficient because, at the same time, 30 students were taking the exam and the instructors' resources did not allow them to control the exam more strongly." Students stated that the pre-given questions in the exam, the possibility of cheating, and the absence of any control system to prevent them negatively affect the objectivity of the online exams. S7 provided the following insight:

> Controlling was good, but of course not as good as a traditional exam. The proctors only saw our faces and hands. But they couldn't interfere too much with our ability to copy. Besides written instructions were not given to the students prior to the online exams. Oral instructions were given about not cheating in the online exam. Of course, these instructions were not followed, because the instructors were not with us on the live broadcast. Most of the students said they cheated when they left the exam. When there was a test in Zoom, there was no way to switch to another page because when I left Zoom out of the window, there was a freeze. But alternative solutions were produced for this, we wrote notes and put them next to the screen, and we shared the answers in our WhatsApp groups.

The effectiveness of online exams also varies from field to field, and it has been stated that while it is a method that can be used in the field of social sciences, it is a method used in science, which reduces the quality of online exams. Students stated that there is no anxiety about learning due to alternative methods, such as cheating in online exams, and that what they learn is not permanent. Additionally, there are statements that internet interruption and the postponement or cancellation of exams negatively affect the quality of the online exam. Student S2 stated:

> However, due to internet problems, starting time of exams can be up to half an hour. During the exam, students stay online for 2 hours and wait their turn. Some instructors determined the exam process by talking to us and it was mutually agreed to plan the process. Some instructors were allowing students to take the exam when the internet was cut off while they were in the exam. However, some instructors did not allow this. The existence of different practices in this regard and the absence of standards reduced the quality.

Transparency of the Online Exam

Three themes emerged in the analysis of this question. These are (1) copy/cheat; (2) control mechanisms; and (3) traditional exams. Findings related to the subject are presented in Table 3.

Table 3. *Themes, Sub-Themes, and Codes Related to the Transparency of Online the Exam*

Themes	Sub Themes	Codes
Copy/Cheat	Precaution	Dean's attendance to exam
		Verbal warning (penalty etc.)
		Camera is on
		360° area representation
	Lack of sanctions	
	Unjust	Giving questions ahead of time
		Rising grades
		Influencing scholarships
	Online cheating styles	Traditional cheating sheets
		Google Classroom
		Using dual monitors
		WhatsApp groups
		Behind-the-scenes notes
	Lack of time	
	Cheating in traditional exams	
Control mechanism	Lack of systemic control	Control with camera
		Lack of supervision (lack of opportunity, etc.)
		Giving questions ahead of time
	Inadequacy of instructors	
Traditional exams	Transparent	
	Fair	
	Realistic	
	Instructive	

Students stated that the transparency of online exams was negatively affected by cheating among students. They noted that even though the authorities applied verbal warnings and penalties, taking the exam by opening the camera and starting the exam after the 360° display of the area where the exam was taken were not enough. In addition, there are opinions regarding the lack of sanctions. "A verbal instruction was given to prevent cheating before the exam (S11)." Student S12 stated:

> In order to prevent cheating at our university, verbal information was given. Before the exam, the instructors said that if they noticed cheaters, they would be expelled from the exam, but the instructors didn't even know who cheated or not.

According to Student S9, "The instructors said, 'Look at the camera and don't cheat.' But whatever you do, the student is the student. There was hardly anyone who did not cheat. Conditions were quite suitable for cheating (S9)." S13 stated:

> I think the test was transparent because it was the deans who attended our exams as supervisors. In our university, the instructions regarding the online exam are verbal, and it has been announced that there will be other penalties in case of cheating. We were also informed again when the test started.

Students stated that the questions were given in advance by the instructors, so the students got high marks, which affected scholarship competition. For this reason, they emphasized that online exams are not transparent. Some students also expressed that the time given in online exams is not enough for cheating. S15 stated, "I don't think any student cheated. Because in an online test, time is not given enough to cheat." In addition, there are striking opinions that cheating is also possible in traditional exams and that this is not just a disadvantage of the online exam. S14 stated:

> I think it is easier to cheat on a real/traditional exam. You can easily ask the students who are with you in a regular exam. However, in an online quiz, it takes a lot of time to write the answer to the photo to share.

And here is what S15 said:

> I think there is more chance of cheating in a real exam. It is not convenient to move too much on the phone. In a normal exam, you can ask the student next to you and get a quick answer. But it takes a lot of time in other ways.

When students were asked what percentage of the class might have cheated, almost all of them gave ratings above 80%. They stated that they made the copy using various methods, such as traditional cheat sheets, Google Classroom, using dual monitors, WhatsApp groups, and behind-the-scenes notes. They stated that the biggest problem underlying this handicap regarding the transparency of the online exam is the lack of a control mechanism.

Students think that such a high rate of cheating is due to the lack of systemic control and instructor inadequacy in this regard. S4 said, "Instructors said to turn on the camera during the exam. But since there is no control over the camera, we copied all the exam answers with Google Classroom." S8 stated: "Today, 60%–70% of instructors cannot use computers. Therefore, I can say that this situation multiplies the cheating rate of students."

The majority of the students pointed out that traditional exams are more transparent, fair, realistic, and encouraging to learning than online exams. S7 said, "I think traditional exams are better. And neither instructors nor students will take it seriously the second time an online test is taken." S5 said, "I never want to take an online exam. I'm getting stressed."

With the view that the online exam can never replace the traditional exam, students drew attention to the stress of the online exam rather than its pleasurable comfort. When the views of the students were examined in a holistic way, it was found that they had more disadvantages than advantages, they still had quality problems and the transparency of the exams was questioned.

Discussion

The results of our study indicated that first impressions of the online exam focused on a variety of contexts, including the advantages, disadvantages, and effectiveness of online exams. According to the results, students find online exams advantageous in many ways. For example, students see the advantages of online exams as preventing time loss, reducing the cost of education and exam anxiety, and learning the exam results quickly. There are various studies in the literature that highlight the advantages of online exams. Among these advantages, eliminating the time limit, reducing the cost (Donovan et al., 2007; McCormack & Jones, 1998; Yetgin, 2021), and accelerating the evaluation process (Dermo, 2009; McCormack & Jones, 1998; Shraim, 2019) come to the fore. Considering the disadvantages of the online exam, we can say those technical and ethical problems are prominent in the student's perceptions. In terms of the technical situation, most of the

students stated that they had problems, such as connecting to the internet, frequent disconnection of the internet, and insufficient or incomplete internet packages. These findings were consistent with those of other researchers (Can, 2020; Yamamoto & Altun, 2020).

Under the theme of disadvantages of online exams, almost all of the students stated that they cheated in online exams. There has always been the possibility of students cheating, whether they are preparing for a term paper, exams, or other projects. Today, advanced technological developments allow students to cheat more easily during online exams. During the pandemic, online courses and student assessments have greatly increased the rate of cheating in exams. Not being in the same physical environment during the exam process can cause problems in terms of control. Situations such as students' researching from numerous sources during the exam or establishing a communication network between students through communication platforms may be the source of cheating.

Findings, such as the widespread use of cheating in online exams, have also been supported by various researchers (Abdelrahim, 2021; Adanir et al., 2020; Flores et al., 2022; Guangul et al., 2020; Noorbehbahani et al., 2021). According to Noorbehbahani et al. (2021), to begin preventing academic dishonesty on the part of students, it is vital to first understand the factors that motivate cheating, as well as the many types of dishonesty and the technology they use. A study showed that approximately 74% of students believe that cheating in an online exam is easier compared to an exam held in a traditional classroom setting (King et al., 2009).

It can be said that there are various applications or services to prevent cheating in online exams. Checking the browser, setting a time restriction for the exam, randomizing the questions and options, and other practices like these are some examples of strategies that can be used to lessen the amount of cheating that occurs in online exams (Dendir & Maxwell, 2020).

The results of our study indicated that the students had the impression that the questions on online assessments were easier than those on face-to-face examinations, and they saw this as an unethical issue. The results indicate that students experience a variety of emotional responses while taking online examinations. Some of the students reported that taking the exam online helped them feel less stressed out, while others reported feeling more stressed. Distance education is a relatively unknown approach in Azerbaijan, so it is natural that it would cause different reactions among students. It could be that the rapid introduction of distance education and the lack of experience in this approach may cause students to experience high stress (Elias et al., 2011). The students who experienced less stress stated that it is comfortable for them to pursue their education in their home environments where the surroundings are mostly in their control and where they can study at their convenience (Altun Ekiz, 2020). Salturk and Gungor (2020) also found that students have lower test anxiety in online exams. Being in the same environment with the lecturers, as authority figures, during the exam may cause students to experience pressure. Additionally, various study findings on the subject have shown that COVID-19 affects the anxiety level of students (Abdelrahim, 2021; Sudarso et al., 2021).

Students also emphasized the exam's efficacy. They perceived online exams as being less effective than traditional exams at measuring learning outcomes. They also stated that the online exam is not appropriate in all departments; they felt that online exams could not accurately measure their proficiency, particularly in departments with intensive applied educational content. A study conducted by UNESCO (2020b) supports what students were saying in that online tests were not found to be sufficient in evaluating different competency areas. Dutile et al. (2011) noted that online assessments are likely better suited for theoretical rather than practical courses.

Students perceive that faculty members and students lack both technical and pedagogical knowledge about online exams. The technical problems encountered in exams conducted on various platforms could not be solved in a short time, and the lack of knowledge of the instructors on how to prepare for an exam in the online environment made it difficult to conduct a qualified exam process. Researchers have discussed

inadequacies and the need for support regarding developing pedagogical skills related to distance education (Can, 2020; Vlachopoulos, 2020). Moreno and Gortazar (2020) emphasized the development of digital literacy skills of both students and educators by pointing out the importance of the distance education process. Researchers (Milla & Shahrokh, 2020; Romero-Hall & Cherrez, 2022; Tejedor et al., 2020) have noted the importance of digital literacy, which is among 21st-century skills (Trilling & Fadel, 2009).

Additionally, students stated that they were told by the instructors about the format of the examination, as well as the timing of its administration. Regardless of whether the exam approach is remote or face-to-face, the instructors should provide students with the most basic information about the exam, such as the content of the exam (topics), what the exam type will be, its duration, and general guidelines regarding exam administration.

Students also reported that they were warned not to cheat on online exams. However, some students stated that the instructors in the exam only gave verbal warnings during the exam, while others stated that they were informed with written instructions regarding the exam process and what kind of sanctions the cheating would cause. Considering that the control process in online exams is more difficult than in face-to-face exams, warnings in writing might create a more deterrent effect so that students do not resort to cheating.

We conclude that students did, in fact, experience difficulties during the process of making the shift to distant education and taking exams online. While the lack of infrastructure restricted access to education, ethical violations in exams have also prevented students from determining their learning level properly. Although the approach and guidance of faculty members to students during the pandemic process are positive, both digital literacy and pedagogical insufficiencies of human resources made it difficult to conduct the process properly.

In general, the results obtained from this study are consistent with those obtained in studies conducted in other countries (Abdelrahim, 2021; Alsadoon, 2017; Guangul et al., 2020; Karaman, 2011). Traditional functions of universities include face-to-face teaching and learning; but, due to globalization and rapid technological advancements, this model is undergoing modification (Szopinski & Bachnik, 2022). It is a known fact that alternative education models, such as hybrid education, virtual university, and virtual campus, are becoming more popular alongside digitalization, particularly in higher education (Sliwka, 2008). It is critical that the education systems globally adapt to these education models that are becoming important alternatives to face-to-face education.

Limitations of the Study

Although the current study provides in-depth insights into only Azerbaijani university students' first online exam experiences, it is not without limitations. This study is limited to the perspectives of Azerbaijani university students. The sample consists of 15 undergraduate students studying at a university in Azerbaijan. Data are based on qualitative data from a small sample. Therefore, broader generalizations must be made cautiously. Despite the limitations, the study provides a starting point to encourage further research in this field in Azerbaijan.

Implications for Practice

The results call attention to the development of distance education infrastructure and offer suggestions for training educators in this field. Furthermore, the results highlight not only online education but also critical points regarding the evolution of the online assessment process. Azerbaijan, which has no legal basis for distance education, must first establish distance education legislation for higher education institutions. It is also important to establish distance education centers in higher education institutions and colleges. Technological infrastructure should be strengthened and expanded in educational institutions. Considering that most higher education institutions do not have the vision to carry out distance education activities, it is

recommended to establish a hardware infrastructure in addition to the technological infrastructure. The research results showed that almost all the students encountered different problems, such as disconnection from the internet or insufficient internet bandwidth during the online exam process. Considering the above, it is recommended to make arrangements for students to use the internet free of charge or at more affordable prices. Determining the digital literacy competencies of academic and administrative staff and organizing training for the development of digital competency skills of those in need can also contribute to the effective realization of the process.

The results make recommendations for making online exams healthier and more reliable, as well as which aspects of measurability should be improved. In this sense, the research is thought to contribute to the relevant literature on the subject. The findings of the study could be interesting and useful, especially for countries looking to adapt their education systems to distance learning. The results demonstrate the significance of infrastructure in distance education. In this sense, countries that intend to establish a distance education system or switch to a hybrid education system can greatly reduce future problems if they consider issues that may arise during the online exam process.

As in any other field, the importance of digitalization in education is growing. Furthermore, given the likelihood that similar crisis situations, such as COVID, will occur in the future, it is critical for higher education institutions globally to adapt quickly to crisis situations and to employ a flexible and dynamic management approach in these situations. Critical to this is ensuring that students have access to the internet that is sufficient to participate fairly in all aspects of the course, including online exams. In this regard, the development of digital skills among participants in the educational process is critical. Given that improving educators' ICT skills may affect the quality of distance education and the effective evaluation of success, it may be beneficial to provide training in this field to higher education administrators, instructors, and students.

In our research, the online exam experience was examined only from the perspective of undergraduate students. In future studies on similar subjects, the experiences of teaching staff and proctors can also be examined. Additionally, to determine whether the experiences of the students differ or not, the view of the students studying both at the higher education institutions in the capital and the universities in the regions can be consulted.

Conclusion

The result of the research highlights the problems experienced in the process of evaluating student success with online assessment in a higher education institution that does not have a distance education infrastructure. Problems experienced with internet connection and cheating in the online exam were evaluated as the most common problems in the process. Students extol the benefits of taking the exam online and claim that it makes the procedure more fun. On the other hand, there were students who consider the process to be more stressful and less educational. Results demonstrate that the lack of legislation on distance education and the inadequacy of distance education infrastructure in higher education institutions prevent the effective implementation of the process and the accurate assessment of student academic achievement.

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