RESEARCH ARTICLE

Online testing and assessment in the English as a foreign language context: Teachers' perspectives

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Abstract

As online assessment is a rather new phenomenon, available research regarding it is limited, and most of the research in literature today examines the views of students regarding online assessment as they are one of the most important stakeholders of exams. On the other hand, although they are the basic users and practitioners of the system, studies on the views and perspectives of instructors on online assessment in the context of English as a foreign language (EFL) are limited in number. With these concerns in mind, this study aims to explore English instructors' perspectives of online assessment in tertiary educational institutions in Turkey with regard to their general views on online assessment, along with their views on affective factors, validity, reliability, security, practicality, and the impacts of online assessment on teaching and learning. In this descriptive study, the data were collected from 302 English instructors working at English preparatory schools in various universities in Turkey through a background questionnaire and the Student Perceptions of e-Assessment Questionnaire (SPEAQ). The results show that instructors' overall perspectives on online assessment are neutral.

Introduction

Testing and assessment play a crucial role within the EFL context, exerting indispensable significance for both students and educators through varied means. First, assessment is essential for learners as it increases their motivation and interest and eventually helps students learn a language (Madsen, 198). When teachers employ meaningful and trustworthy assessment methods, students will be more willing to learn the language and enjoy a sense of achievement, thereby facilitating their overall learning process. In addition, when students are aware that they will be evaluated, they will study

the language more willingly, thus positively impacting their overall learning outcomes. Second, testing and assessment are very important for teachers to collect information on the language capabilities of learners (Hughes, 1989). With the help of tests and evaluation methods, teachers will be able to identify students' level of language proficiency, their strengths, and weaknesses and will be able to measure if learners have achieved their goals. Therefore, they will be able to get to know the students and their needs easily. Finally, according to testing and evaluation results, teachers and administrators can make educational decisions in the right direction (Hughes, 1989). This way, the teaching program, books and materials in use, course content, and the teaching method will be effectively evaluated and re-adjusted if necessary (Aydin, 2004). For these reasons, testing and assessment have been the backbone of language teaching for enlightening the teaching and learning process and providing the opportunity to improve them. Without assessment, it will not be possible to evaluate learner responses to educational activities (Pehlivan Şişman & Büyükkarcı, 2019).

Online testing and assessment in the EFL context are also significant for three fundamental reasons. First, online testing and assessment fit well into the 21st-century language teaching context since it is the natural outcome of changing and evolving education systems with improving technology. Today's students, called Generation Z learners or I-Gens (Rothman, 2016), prefer the involvement of technology in their language learning experience. Online assessment is considered a more accessible and suitable system for today's students (Prensky, 2010), and this preference should be reflected in language assessment activities (Appiah & van Tonder, 2018). Second, online testing and assessment provide increased practicality, logistic efficiency, and reliability in language assessment (Long et al., 2018). It allows the test taker to take the test in any location and at any time, increasing the flexibility for taking the test. Moreover, when marking is done by automatic scoring, online assessment increases practicality by saving time, effort, and accuracy by utilizing computer programs for marking. It also provides immediate reporting of the results to stakeholders, thereby saving time. In addition, since test developers can upload and update test items easily, with little time and location restrictions, it eases the test developers' work (Long et al., 2018). The final reason why online testing and assessment is essential is that they provide the opportunity to continue testing and evaluation activities in the EFL context

even in times of crisis (Alghammas, 2020). With the help of online assessment methods, language learning and assessment activities can continue uninterruptedly, even when face-to-face learning and assessment have to stop.

Teachers' perceptions of online testing assessment in the EFL context are also very important for three reasons. First, EFL teachers need to adapt to technological improvements since they are teaching and assessing today's tech-savvy students who automatically need the involvement of technology to be interested (Mahbub, 2020). As language teachers need to grab students' attention, they need to make use of online assessments. However, if they do not believe in the effectiveness or usefulness of the system, they cannot appeal to students. Therefore, knowing teachers' perceptions regarding online testing and assessment in the EFL context is paramount. Second, to improve assessment, it is necessary to identify the needs and requirements of teachers with regard to online assessment methods (Gamage et al., 2020). Improving assessment or catering to their needs may not be possible without asking them about their perceptions, wants, and needs. Third and last, it is important to discover teachers' perceptions of online assessment in the EFL context to see how well their opinions match with the principles of language learning and teaching in teachers' minds. Since their perceptions greatly affect their performance in class, it might be important to understand what teachers think of online assessment and make changes in the curriculum, assessment methods, teaching methods, and the teaching program accordingly (Balaman & Tiryaki, 2021).

As online testing and assessment in the EFL context have recently gained popularity, its problems are gradually emerging. One of the most commonly referred problems related to online testing and assessment is the issue of security (Mellar et al., 2018). It is believed that language students find many interesting ways to cheat or commit plagiarism during online testing and assessment practices, negatively affecting the reliability of the assessment (Rogers, 2006). Additionally, many teachers believe that online tests and assessments make both cheating and plagiarism easier (Mellar et al., 2018). The second problem of online assessment is the issue of validity. As many online tests include objectively marked items such as multiple choice items, true/false items, or fill-in-the-blank types of items, opportunities to foster students' critical

thinking abilities are overlooked. Thus, many of the online EFL assessment tasks and tests are found to be disempowering since students who do not add any ideas, improve existing opinions, or devise new ways of thinking become passive participants in activities (Öz, 2014b). Finally, accessibility and practicality are also problems for online testing and assessment. Lack of necessary equipment or internet connection can lead to serious problems during the process of testing and assessment tasks (Alruwais et al., 2018). Sometimes, students tend to feel anxious because of the Internet connection, Internet speed, or software problems such as unexpected updates, system failures, or overloaded systems (Khan & Khan, 2019). In addition, complicated test procedures that might require technological support might result in serious consequences for the stakeholders (Fitriyah & Jannah, 2021).

An important issue about testing and assessment is that despite their significant role as item writers, assessors, or decision-makers, teachers' perception of testing and assessment in the EFL context is usually ignored (Sevilen, 2021). Unfortunately, when their opinions about testing and assessment practices are not given enough importance, testing, and assessment activities might not lead to better learning outcomes in the language learning context, contrary to what is expected of them. Since EFL teachers are to choose learning materials, make up the curriculum, or define learning objectives, their perceptions, and conceptions play a very important role in making those decisions, as the research on the issue is limited in number (Mede & Atay, 2017), the EFL learning context might be deeply affected by this lack of insight negatively. The understanding which suggests that not all teachers participate in item writing activities and they do not need to have an understanding of assessment-related issues is a problematic approach since teachers need to be highly aware of assessment issues as one of the basic stakeholders of testing and assessment, even if they are not test writers (Sevilen, 2021). That is because teachers' understanding of assessment activities fundamentally affects classroom learning and teaching activities (Sahinkarakas, 2012). Thus, raising awareness on the issue of teacher perceptions regarding assessment in the EFL context is very important.

As mentioned before, since online testing and assessment in the EFL context is a new practice in many institutions, it has brought about many challenges and

uncertainties (Gamage et al., 2020), most of which are directly related to teacher roles and responsibilities. As the process involves many uncertainties, it causes many differences in teachers' ideas. Thus, the problem of now knowing how EFL teachers feel about these uncertainties is an issue in terms of the effectiveness, efficiency, and safety of online testing and assessment procedures. However, EFL teachers' general feelings and attitudes about the issue are not known because of the lack of research (Rea-Dickins, 2004). When the teachers' overall perceptions are not known, how much they accept this new phenomenon is also subject to doubt. As the acceptance level of new technology is unknown, it is impossible to understand the general attitude toward the new procedures (Al-alak & Alnawas, 2011). This can also be valid for the components of validity, reliability, and the effects of assessment on learning and teaching. In addition, EFL teachers' perception of online testing and assessment is highly affected by their computer expertise (Alruwais et al., 2018), and existing studies on the issue reflect conflicting results (Öz, 2014b). For this reason, it is crucial to explore how teachers perceive online testing and assessment concerning their computer expertise. Below, a brief review of the literature on EFL teachers' perceptions of online testing and assessment is presented.

Literature review

The results of a limited number of studies indicate that one of the most common concerns for teachers regarding online assessment is the issue of security and academic integrity. Rogers ' study deals with the teachers' perspectives regarding academic integrity which aims to find if online assessment tools are used in a higher education institution and what concerns the faculty has regarding online education. Rogers (2006) revealed that more than half of the faculty used online assessments under unsupervised environments, and almost half of the faculty members using online assessment were suspected of cheating in varying methods such as Internet surfing during an assessment, copying, or cheating from others. It was also found that no instructors were using security software to prevent cheating (Rogers, 2006). Another recent study by Sa'di et al. (2021) conducted in certain universities in Jordan revealed that instructors were skeptical about online assessment due to security and academic integrity issues and the

lack of training and expertise. Through an online survey, participants expressed their perceptions of online assessment and provided feasible solutions to the challenges such as providing training for online assessment practices for instructors, using high-tech plagiarism software, and using a combination of formative and summative online assessment tasks (Sa'di et al., 2021) Another study focused on academic integrity in online assessment (Mellar et al., 2018). In their study, they used a mixed method of surveys and interviews to see if faculty made use of a newly introduced security system to prevent cheating cases in three different universities and some solutions to address the issue. They found that faculty expected cheating to be greater in online assessment. In addition the biggest cheating cases occurred in the form of ghostwriting, plagiarism, or copying work from the Internet. Thus, they concluded that online systems do not increase cheating cases, but authorship-checking software should be used, and assessment should be made in a variety of methods rather than in one method or one type (Mellar et al., 2018).

According to other studies investigating how teachers perceive online assessment in general, teachers tend to have positive attitudes regarding online assessment in general but also have certain concerns such as the lack of technical infrastructure, technical and technological support, or security. For instance, in a study by Chien et al. (2014), semi-structured interviews were conducted to explore teacher beliefs about technology-based assessments and the relation between teacher beliefs and their practices. It was found that the vast majority of teachers found technology-based assessment useful, beneficial, and effective, and the difficulties regarding the use of technology-based assessment stemmed from poor infrastructure or lack of technical support (Chien et al., 2014). A more recent study by Küppers and Schroeder (2020) looked into university teachers' perceptions of online assessment through online surveys and demonstrated that most of the teachers were open-minded about the use of online assessment, and their major concerns were related to fairness and security. They also compared demographic results and revealed that the younger and the more technologically experienced the teachers were, the more positive attitudes they had toward using online assessment tools.

Other studies investigating teacher perceptions of online assessment show that although teachers find online assessment useful in times of crisis, they do not prefer to use it as a regular assessment. For instance, a study in Saudi Arabia explores the university instructors' general feelings toward online assessment in terms of its validity, reliability, security, practicality, the types of questions they prefer during the online assessment, and differences between the types of questions that male and female instructors choose to use (Alghammas, 2020). In his quantitative study, Alghammas (2020) used Dermo's (2009) questionnaire, which originally explored student perceptions on the issue and found that instructors working at Saudi universities had a slightly positive attitude toward the use of online assessment at universities with some concerns such as technical problems, security issues, and reliability. It was also revealed that the faculty had not used online assessment tools a lot previously. The research indicated that online assessment might be useful in difficult times but may not stand as a regular assessment method in their institution. The research could not indicate any significant correlation between the gender of participants and their question type preferences. As for the types of questions, most faculty members expressed that the questions should be feasible for objective grading due to immediate feedback opportunities and scoring ease (Alghammas, 2020). In another noteworthy and recent study, Yulianto and Mujtahid (2021) explored teacher perceptions towards online assessment through online interviews with 12 teachers and found out that in the Indonesian context, online assessment was less effective than traditional assessment due to the socio-economic background of students, lack of Internet connection and teachers' inexperience in and unfamiliarity with the technology. The teachers found online assessment useful in emergencies but very difficult to conduct (Yulianto & Mujtahid, 2021).

Some other studies indicate that teachers might also have negative attitudes toward online assessment due to several factors such as inexperience in technology, lack of support from relevant parties, or personal barriers or difficulties. In a study that investigates teachers' perceptions of online assessment in higher education institutions in Lebanon, it was found through online interviews that instructors were anxious about using online assessment due to the lack of training before using it, and they were refraining from using summative assessment via online tools (Mirza, 2021). In China,

another qualitative study by Zhang et al. (2021) revealed that the lack of preparation time and training caused a great variety in teacher practices of online language assessment at universities. The sudden change to online assessment due to unexpected situations caused great stress among teachers. Teachers also stated that they feared security issues, and thus, they mostly used formative online assessment rather than summative online assessment (Zhang et al., 2021). Another study in the Indonesian context searched for teachers' perspectives on online formative assessment and the advantages and constraints of online assessment according to their understanding (Astiandani & Anam, 2021). Through semi-structured interviews, it was found that public school teachers mostly had negative perceptions toward online assessment due to the lack of parental support when necessary and the irresponsible behaviors of students. In private institutions, though, teachers were neutral toward it. Although they listed advantages such as immediate feedback, promoting autonomy, and being enjoyable and motivating for the students, the lack of Internet connection and the time-consuming nature of creating assessments made online assessments difficult for them. Teachers also proposed some solutions such as getting support from all stakeholders and obtaining better Internet connection availability (Astiandani & Anam, 2021). In Iran, a similar result was found in the study by Ghanbari and Nowroozi (2021) which searched for teacher perceptions of online assessment through interviews and showed that teachers faced technological barriers such as lack of technical infrastructure and lack of technical knowledge and thus, their online assessment experience was affected negatively. Teachers also expressed personal problems such as the lack of motivation and awareness about the issue. Thus, their overall perspective on online assessment practices remained negative (Ghanbari & Nowroozi, 2021). Another similar result was obtained from a study conducted in India by Joshi et al. (2020) through an interview with 19 teachers which found that teachers had problems in both home settings such as the lack of basic facilities, personal external distractions, and institutional settings such as lack of budget, training and technological support (Joshi et al., 2020).

Overview of the current study

In its general sense, language teaching assessment aims to gather information about different aspects of educational processes to make meaningful decisions about plausible

action plans to improve teaching and learning. (Carol, 1961, as cited in Fulcher, 2010). To this end, as one of the important stakeholders of the assessment process, teachers' role should not be underestimated but rather valued and investigated. Their perception and understanding of assessment will play a significant role in the decision-making process as when they develop a solid understanding and ownership of the assessment, they will affect the whole process by making beneficial decisions for learners and also by improving learner and public acknowledgment through raising awareness (Xerri & Vella Briffa, 2018). Moreover, existing literature shows that how teachers conceive assessment deeply affects how they behave in the classroom, directly impacting learning and teaching (Sahinkarakas, 2012). As the core of the language learning process, classroom activities might be affected by teachers' perceptions, and thus, their opinions on assessment should be considered. In short, when institutions apply online testing and assessment procedures in language classes, it is vital to identify teacher perceptions of the new assessment procedures (Alghammas, 2020). With these concerns in mind, this study aims to discover teachers' perceptions of online assessment practices in the EFL context and asks one research question:

- How do English as a foreign language instructors perceive using online testing and assessment?

Method

Research context

This research aims to identify online assessment perspectives of teachers working at English preparatory programs of universities in Turkey. It mainly explores instructors' general perspectives of online assessment. The research follows an analytic approach as it is assumed that the survey items relate to the predetermined construct of online assessment perspectives, and it tries to discover the relationship between this construct and the items rather than attempting to analyze the construct as a whole. The participating groups naturally exist without any pre-formation; thus, the data is collected naturally. In terms of the degree of control over the research context, it can be said that the research is carried out in a semi-controlled environment as the context is narrowed

down to university teachers only, and the scope is to teacher perceptions of online assessment in general, as well as, reliability, security, practicality, and pedagogy issues. Finally, it is possible to claim that the researchers have been as objective as possible since they had no control over the participants and their answers (Seliger & Shohamy, 1989).

Participants

Participants of the study were 302 English instructors working at the English preparatory programs in various universities in Turkey; 228 (75.5%) were females, and 74 (24.5%) were males. The mean age of these participants was 41.1, between 24 and 71. The mean score for teaching experience was 17.5 years with one year of experience being the lowest and 48 years being the highest level of experience. One hundred seventy-seven of the participants had a master's degree (58.6 %), while 92 had a bachelor's (30.5%) and 33 had a doctoral degree (10.9%). Of these participants, one hundred eighty-eight instructors graduated from English Language Teaching departments (62.3%), 74 of them graduated from English Language and Literature departments (24.7%), 19 from American Culture and Literature departments (6%), and 21 (7%) from other departments such as Translation Studies, or Linguistics. Of the participants, two hundred and three (67.4%) instructors worked at private or foundation universities, and 99 of them worked at state universities (32.6%). Two hundred fifty-six of these teachers expressed that they did not have an administrative duty (84.7%), while only 46 of them (15.2%) stated that they had administrative duties. As for office duties such as being a curriculum development, testing, and assessment, or professional development unit member, two hundred and six instructors stated that they did not have such responsibilities (68.2%), and 96 of them stated that they were working at one of these offices (31.7%). One hundred sixty-eight of the participants stated that they found themselves good in terms of computer expertise (56.6%), 69 of them (22.8%) stated they were excellent at using computers, and 65 of them (21.5%) thought that they were adequate users of computers.

Tools

The study used two data collection tools. First, a background questionnaire to collect demographic and background information about participants was shared with the

participants. The participants were expected to give information about their gender, age, highest level of educational degree completed, graduation department, level of teaching experience in years, position in their institutions, and level of computer expertise. The second tool was the SPEAQ developed by Dermo (2009), which was originally administered to students to identify their online assessment perceptions and perspectives. In the original research, the questionnaire was divided into six dimensions related to online assessment: affective factors, validity, practicality, reliability, security, and effects on learning to analyze the data more effectively (Bryman & Cramer, 2001, as cited in Dermo, 2009). Then, five indicators to measure students' perceptions of e-assessment for each dimension were formed in accordance with existing literature and expert opinions (Dermo, 2009). Although the scale's overall reliability coefficient and construct validity values were not reported, the reliability coefficients in Cronbach's alpha for each questionnaire component were stated in the paper. The reliability value for affective factors was .80, and .33 for validity. For practicality, it was measured as .68, and for reliability, it was .63. For security, it was measured as .69, and for effects on learning, it was .82. Dermo's (2009) SPEAQ was adapted to measure teachers' perceptions and perspectives of online assessment and includes 30 items, slightly changed in wording from the original to fit the purpose of this research. To indicate their beliefs on each of the 30 statements with a numerical expression, the participants were asked to select the options given on a Likert-type scale of 5 points (5= "Strongly Agree"; 4= "Agree", 3= "Neutral", 2= "Disagree", 1= "Strongly Disagree"). Each of five statements of the survey refers to an aspect of testing and assessment collected data on affective factors regarding the use of online assessment (See Appendix A).

Procedure

Upon receiving the approval of the Ethics Committee of Educational Sciences, the online survey was shared with instructors working at English preparatory programs of diverse universities in Turkey via e-mails and social media tools. Since the online questionnaire and scale are one of the most efficient ways of data collection, participation is positively affected when participants are sent personal messages via mail (Muñoz-Leiva et al., 2010). The data were collected through personalized e-mails. It

was ensured that the data would be anonymous used only for research purposes, and participation would be on a voluntary basis.

Data analysis

SPSS was used in the analysis process. Before the analysis, some of the items had negative expressions regarding different aspects of online testing and assessment. The reliability of the overall survey with 30 items was found as $\alpha = .92$, indicating good internal reliability. The reliability value of each aspect of online assessment is as follows: $\alpha = .81$ for affective factors; $\alpha = .61$ for validity; $\alpha = .73$ for practicality; $\alpha = .70$ for reliability; $\alpha = .73$ for security and $\alpha = .83$ for impact on teaching and learning. The overall construct validity of the scale was computed as a percentage of total variance of 59.82. The values regarding the construct validity and internal consistency for the aspects related to online assessment evaluated in this scale are shown in the following table.

Table 1

The reliability coefficients and % of variances

Scales	N of Items	Cronbach's Alpha	% of variance
Overall Scale	30	.92	59.82
Affective Factors	5	.81	67.82
Validity	5	.61	62.84
Practicality	5	.73	49.83
Reliability	5	.70	56.23
Security	5	.73	59.96
Impact on Teaching and Learning	5	.83	60.31

Results

The values in Table 2 show that instructors had an overall neutral perspective of online assessment in this context. According to the table, it can be seen that the impact of online assessment on the teaching and learning category had the highest average score ($\bar{x}=3.38$), whereas the security aspect had the lowest ($\bar{x}=2.32$). While the overall average for all the items was 2.81, the closest mean score to the overall average belonged to validity ($\bar{x}=2.80$) and practicality ($\bar{x}=2.72$).

Table 2

Descriptive statistics for the aspects of online assessment (N=302)

Scales	Mean	Std. Deviation
Overall Scale	2.81	.58
Affective Factors	2.70	.82
Validity	2.80	.69
Practicality	2.72	.74
Reliability	2.96	.72
Security	2.32	.67
Impact on Teaching and Learning	3.38	.70

According to the values given in Appendix A, the mean scores indicate that the perceptions of instructors could be different according to each component of online assessment. To begin with, the mean score of affective factors ($\bar{x}$=2.70) was lower than the overall average ($\bar{x}$=2.81), suggesting that teachers had psychological barriers regarding online assessment. Instructors felt more comfortable with paper-based exams ($\bar{x}$=3.80) when compared to online exams ($\bar{x}$=2.36) despite the fact that they expected online assessment to be a part of the regular assessment at the tertiary level ($\bar{x}$=3.40). For the validity aspect of online assessment ($\bar{x}$=2.80), Instructors' perspectives were in line with their overall perceptions ($\bar{x}$=2.81). However, they possibly thought that online assessment could not effectively assess their subject area ($\bar{x}$=2.92), as English could be too complex to deal with online multiple-choice items ($\bar{x}$=3.21) and online assessment also tested the technological skills of students ($\bar{x}$=3.40). Practicality ($\bar{x}$=2.72) also fell behind their overall perceptions of online assessment ($\bar{x}$=2.81) as they very strongly believed that technical problems ($\bar{x}$=3.96) and Zoom/computer fatigue ($\bar{x}$=3.59) made online assessment impractical. They did not seem to appreciate the practicality of online assessment in terms of time and space very much as well ($\bar{x}$=2.95). Yet, they welcomed the prevention of paper waste with online assessment ($\bar{x}$=3.74). Reliability scores ($\bar{x}$=2.96) of instructors were a little higher than their overall perceptions ($\bar{x}$=2.81) as they thought that computer-based marking was more accurate ($\bar{x}$=3.50). However, they also thought that paper-based exams were fairer than online assessments ($\bar{x}$=3.45). Security ($\bar{x}$=2.32) fell significantly behind the overall perceptions of instructors ($\bar{x}$=2.81), making this aspect the most negatively perceived aspect of online assessment. They especially worried about the ease of cheating ($\bar{x}$=4.26), and they had little trust in the system in

terms of plagiarism and cheating ($\bar{x}$=2.26) and hackers ($\bar{x}$=3.75). Instructors seemed to value the impacts of online assessment on teaching and learning as the mean score of this component ($\bar{x}$=3.38) was a lot higher than their overall perception ($\bar{x}$=2.81). Last, they seemed to appreciate the immediate feedback opportunity of online assessment ($\bar{x}$=3.65) and its complying nature with online learning ($\bar{x}$=3.75).

Conclusions and Discussion

This study aims to investigate teachers' perceptions of online testing and assessment. Given that the Internet and computers have inevitably been integrated into many aspects of education because of advancing technology (Momeni, 2022), it is of utmost importance to discover how teachers perceive online assessment. To this end, instructors' overall perceptions of online assessment are identified, and their overall perceptions of different components of online assessment are studied. This study concludes that most instructors hold a neutral perception of online assessment. It is apparent from instructors' responses that although a small minority seems to appreciate the advantages of online assessment in terms of practicality and pedagogy, the vast majority seem to have serious concerns regarding anxiety, difficulty, reliability, and security.

This study shares similar results with many studies in the existing literature. Many existing studies in the literature indicate that teachers have profound concerns and worries regarding security issues. Rogers (2006), Mellar et al. (2018), Meccawy et al. (2021), Alghammas (2020), and Sa'di (2021) are some of the researchers that conclude that teachers have serious security and academic integrity concerns for online assessment. This study indicates that the same concerns are shared by teachers, as seen in instructors' responses to the security component. Moreover, this study also shares common findings with Rollim and Isaias (2018), as both studies indicate that teachers lack trust in the system of online assessments. Another similarity of results between this study and other studies such as Mirza (2021), Zhang et al. (2021), and Astiandani and Anam (2020) is that instructors feel anxious during online assessment due to many reasons. This study also concludes that instructors' stress levels increase during online assessment. Another similar finding is on technical barriers. The current study shares

similar results with Nowroozi (2021) and Joshi (2020), as all conclude that instructors face technical barriers during online assessment. In this study, instructors' perspectives on technical issues are apparent in their responses regarding technical problems. Furthermore, similar to Yulianto and Mujtahid (2021) who found that teachers feel online assessment is less effective compared to paper-based exams, this study reveals that the majority of teachers would feel more comfortable with paper-based exams, and they would prefer online exams less than paper-based exams. Moreover, they find paper-based exams fairer than online ones, indicating that instructors find online assessments less efficient than traditional ones.

There are also contrasting results of this study with others in the literature with regard to many findings. First, this study shares contradictory results with those claiming that instructors have positive perspectives of online assessment with less anxiety when the assessment is online (Baleni, 2015). In the current study, on the other hand, instructors seem to have neutral perspectives towards online assessment, with a serious level of anxiety, as can be seen in the mean scores of instructors in affective factors. Other studies in the literature that have different results from this study are Chien et al. (2014) and Fageah's (2015) studies, both of which reveal that teachers have positive attitudes toward online assessment. However, the results of this study reveal that instructors had a neutral perception toward online assessment. In sum, the current study has contradictory results with other studies in literature, some of which found that instructors have less anxiety during online assessment and positive attitudes toward it.

There are also studies that are in partial agreement with the results of this study. First of all, this study partially complies with Küppers and Schroeder's (2020) study and Fitriyah and Jannah's (2021) study, both of which reveal that instructors have positive perspectives toward online assessment but have security concerns in mind. This study exhibits findings similar to those of the aforementioned studies, as security emerges as the primary concern based on the responses of participating instructors while having neutral perspectives toward online assessment. Another study that aligns, to some extent, with this study is Asma's (2021) research, which reveals that teachers have positive attitudes towards online assessment owing to its benefits such as being flexible and eco-friendly, but have concerns toward it because of screen fatigue and cheating

issues. The current study also unveils instructors' concerns about screen fatigue and cheating. However, as the current study concludes that instructors have neutral perceptions of online assessment, contradicting results that were reached by Asma (2021) regarding the overall attitude of instructors.

In conclusion, this study contributes to the existing literature by providing scientific data on a rather immature field of research, which is online testing and assessment, collected from a specific group of teachers who work in the field of EFL. The study may also help relevant parties such as teachers, administrators, curriculum developers, and item writers working in the EFL context to make educated decisions regarding online testing and assessment issues. The results are to be analyzed meticulously and, therefore, may be helpful in planning and administering online tests and assessments in the EFL context in a more relevant manner. Finally, by shedding light on how teachers perceive online assessment in the EFL context, this study may open the gate for further research on online assessment practices in the EFL context.

Teachers can benefit from practical recommendations in light of this research. Since teachers have a neutral perspective of online assessment with many issues in mind such as security and validity concerns, less appreciation of flexibility of time and space, nonacceptance of immediate feedback chances, and disapproval of potential positive contributions to class learning, it is necessary to raise awareness on such issues with relevant input. Thus, it is essential to help instructors understand and appreciate the nature of online assessment with to-the-point workshops or training sessions.

As for decision makers such as school administrators, testing office members, and test writers, several recommendations can be put forward. First, as it is evident that teachers' overall perception of online assessment is neutral, security being the least positive aspect of online assessment according to teachers' perspectives, decision-makers can improve the security of the systems against both cheating and hackers. To this end, several measures such as using a secure browser technology, exam recording, auto and live proctoring methods can be taken. Moreover, exam data should be kept in well-protected virtual areas so hackers cannot enter the system. In order to ensure security and prevent technology-related misconduct or failures, continuous technology support should be provided before, during, and after the exam. Second, the decision-

makers should be aware of the benefits and opportunities that online assessment might provide and promote online assessment in their institutions by giving relevant information and training to the teachers working at their institutions. As online assessment will probably be much more common in the future thanks to its ease of use, efficient administration, ease of grading and grade announcement, flexible nature of time and space, prospect of giving immediate feedback to the student and the teacher, institutions, and decision-makers need to be ready to equip their instructors with essential information and skills. Moreover, they need to be ready to make necessary technological innovations and install the required equipment to adapt to 21st-century assessment methods.

There are several limitations of this study. First, the data were collected from 302 participants who worked in a specific context in Turkey. Second, only quantitative data is used to come up with descriptive results. The third limitation is that the data is collected in a limited time, which might lead to the assumption that instructors' overall perceptions of online assessment might change or improve. A fourth limitation of this study is the challenge of studying the perspectives of instructors as perspectives, beliefs, perceptions, and attitudes are personal values that are hard to measure and explain, especially with a quantitative study.

Some recommendations for further research can be noted. First, instructors' perspectives of online assessment should be researched in as many contexts as possible since they are actually the "agents of the assessment process" (Harlen, 1996, as cited in Shim, 2009). Being the core users of the system, they contribute greatly to the decision-making process in relation to assessment, teaching, learning, policies, and curriculum. In other words, how teachers perceive online assessment seriously affects the way they implement online assessment practices in and outside the class. Therefore, as teachers' beliefs and perceptions greatly influence their practices, a considerable amount of research should be done to understand their perspectives on all types of assessment, including online assessment, and the factors that influence their perceptions (Shim, 2009). Second, it is necessary to understand the dynamics, principles, designs, and pedagogical implications of online assessment to fully utilize the unprecedented potential of online assessment for students' learning and teachers' jobs (Stödberg,

2015). Third, data collection can be done from multiple resources. Although the data collected from instructors is meaningful, seeing the issue from the eyes of the students is crucial to understanding the issue of online assessment in a better and clearer way, as they are also at the core of assessment along with teachers. Moreover, to view the issue from the administrators' and testing office members' viewpoints, involving them in the process would be wise. Involving as many relevant parties as possible will allow data collection in a multifaceted way, making data triangulation possible multiple times.

Ethics Committee Permission Information

This research study was conducted with the Research Ethics Committee approval of Istanbul Medeniyet University, dated 03.10.2022 and numbered 2022/08-01.

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Appendix A

Descriptive statistics for the scale items (N=302)

Items		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
1. Using a computer adds to the stress of exams for teachers.	N	24	63	64	125	26	3.21	1.11
	%	7.9	20.9	21.2	41.4	8.6		
2. I expect computers to be used as part of regular assessment at university.	N	15	48	81	116	42	3.40	1.06
	%	5	15.9	26.6	38.4	13.9		
3. I'd feel more comfortable if the exam was on paper, not online.	N	9	32	59	110	92	3.80	1.07
	%	3	10.6	19.5	36.4	30.5		
4. I find it hard to invigilate/do relevant tasks when doing an online exam.	N	24	68	57	122	31	3.22	1.14
	%	7.9	22.5	18.9	40.4	10.3		
5. I'd rather do exams on a computer than on paper, because I am used to working online.	N	57	138	59	36	12	2.36	1.04
	%	18.9	45.7	19.5	11.9	4		
6. Online assessment is appropriate for my subject area which is English.	N	35	83	74	91	19	2.92	1.13
	%	11.6	27.5	24.5	30.1	6.3		
7. My subject area/ English is too complex to be dealt with by online multiple-choice questions.	N	23	88	43	96	52	3.21	1.24
	%	7.6	29.1	14.2	31.8	17.2		
8. Online exams don't just test knowledge of the subject, but IT skills as well.	N	10	61	60	138	33	3.40	1.03
	%	3.3	20.2	19.9	45.7	10.9		
9. Online exams facilitate more authentic assessment than traditional methods through integration of multimedia, simulations, etc.	N	16	78	84	114	10	3.07	.98
	%	5.3	25.8	27.8	37.7	3.3		
10. Because they can guess the answer, online multiple-choice questions don't really reflect students' level of knowledge.	N	10	83	57	102	50	3.32	1.14
	%	3.3	27.5	18.9	33.8	26.6		
11. Online assessments use less paper, which is important to me.	N	7	34	56	137	68	3.74	1.00
	%	2.3	11.3	18.9	45.4	22.5		
12. Technical problems make online exams impractical.	N	3	30	34	143	92	3.96	.95
	%	1	9.9	11.3	47.4	30.5		
13. Computer/Zoom/Internet fatigue makes online assessments impractical.	N	6	56	53	125	62	3.59	1.06
	%	2	18.5	17.5	41.4	20.5		
14. It isn't practical for students to do online exams in the computer labs/ dormitory rooms/ libraries.	N	12	57	52	123	58	3.52	1.11
	%	4	18.9	17.2	40.7	19.2		
15. Online exams are more practical than paper based exams because they are free from time and space.	N	31	91	66	89	25	2.95	1.15
	%	10.3	30.1	21.9	29.5	8.3		
16. Marking is more accurate, because computers don't suffer from human error.	N	9	45	71	137	40	3.50	.99
	%	3	14.9	23.5	45.4	13.2		
17. The technology used in online assessments is unreliable.	N	19	71	77	110	25	2.83	1.07
	%	6.3	23.5	25.5	36.4	8.3		
18. Online assessments favor some students more than others.	N	28	76	51	116	31	3.15	1.18
	%	9.3	25.2	16.9	38.4	10.3		
19. Paper-based exams are fairer than online exams.	N	10	67	59	108	58	3.45	1.13
	%	3.3	22.2	19.5	35.8	19.2		
20. Randomized questions from a bank means that sometimes students get easier questions.	N	10	64	86	126	16	3.24	.95
	%	3.3	21.2	21.2	41.7	5.3		

Items		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
21. The test materials and results of online assessment are just as secure as paper-based assessment.	N	28	101	85	76	12	2.81	1.04
	%	9.3	33.4	28.1	25.2	4		
22. The technology used in online exams is sufficiently effective in dealing with cheating and plagiarism.	N	80	120	51	44	7	2.26	1.07
	%	26.5	39.7	16.9	14.6	2.3		
23. It is easier to cheat on online exams than with paper-based exams.	N	1	18	25	113	145	4.26	.87
	%	.3	6	8.3	37.4	48		
24. The online exam system is vulnerable to hackers.	N	6	25	66	146	59	3.75	.93
	%	2	8.3	21.9	48.3	19.5		
25. Username and password login provide adequate security for online exams...	N	34	122	92	59	4	2.56	.94
	%	11.3	40.4	30.5	16.6	1.3		
26. The potential for immediate feedback with online assessment could help students learn.	N	2	33	66	166	35	3.65	.84
	%	.7	10.9	21.9	55	11.6		
27. Online assessment facilitates a more adaptive learning approach than paper-based exams.	N	7	73	109	98	15	3.13	.91
	%	2.3	24.2	36.1	32.5	5		
28. Online assessment can add value to students' language learning.	N	7	78	101	102	14	3.12	.92
	%	2.3	25.8	33.4	33.8	4.6		
29. Online assessment is just a gimmick that does not really benefit learning and teaching.	N	19	131	76	65	11	2.72	.98
	%	6.3	43.4	25.2	21.5	3.6		
30. Online assessment goes hand-in-hand with e-learning (erg, using Blackboard/ Zoom/ Moodle etc).	N	5	23	58	172	44	3.75	.85
	%	1.7	7.6	19.2	57	14.6		