



EFL Palestinian Students' Perception of E-Assessment amidst the Covid-19 Pandemic

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Abstract: It is not surprising that most institutes, schools, and universities are shifting from traditional learning to online learning due to the coronavirus, which is an international concern that has changed the educational system all over the world. This study aims to investigate the perception of EFL students at Hebron University about online assessment benefits and challenges during COVID-19. The participants of this study were 64 English major students from Hebron University. An online questionnaire consisting of 40 questions was used to collect the data. The researchers followed the quantitative approach. According to the findings of this study, Students' overall view of e-assessment was moderate. The researcher included in the questionnaire eight domains. They got varying degrees. Compatibility domain (M=3.74), awareness domain (M=3.71), self-efficacy domain (M=3.57), perceived usefulness domain (M=3.53), IT support domain (M=3.48), perceived ease of use domain (M=3.48), peer influence and superior influence domain (M= 3.41), resource facilitation domain (M=3.20).

Keywords: E-assessment, Hebron University, COVID-19.

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Introduction

In Palestine, like in many other countries, e-learning and technology have become important to continue and enhance the learning and teaching process. Many countries resorted to using it due to the coronavirus pandemic. E-learning makes changes in our lives. It changes the process of acquiring and teaching knowledge and creates new



tools for assessments. Many technical systems and programs have evolved and appeared that are used in e-learning. In addition to the coronavirus pandemic, these make it necessary to think about and create online assessment tools to measure students' ability, behavior, characteristics, and academic progress. Teachers know that evaluating students is an important action which is not restricted to traditional exams. Online exams can be taken on laptops and computers. Teachers' roles also change during the coronavirus because they become e-assessment developers rather than communicators of students' tests. E-assessment is becoming more widely used during the coronavirus pandemic. It is also known as an online assessment, computer-assisted/mediated assessment, and computer-based assessment. E-assessment is defined as referring to the numerous ways in which information technology is used to assess and measure student learning. It is used to accommodate students who learn at different rates; assessment is provided on a timely basis and is adaptive. It entails automating administrative procedures related to assessment tasks as well as digitizing content for online testing, which includes everything from multiple-choice tests to interactive problem-solving assessments. Another definition of e-assessment that Crisp (2011) reported is "a unique process of recording students' responses and providing feedback." Cook and Jenkins (2010) defined e-assessment as "end-to-end electronic assessment processes." There are many types of online assessment, including one note, online discussion, Google form, open book test, multiple choice, oral exams, open-ended questions and presentations, etc. There are immense advantages to e-assessment. It has a flexible nature that enables students to submit their exams online from any place. It is also a fast, highly interactive, economical, accurate, and immediate method. It provides useful and powerful feedback that enables the teacher to know if his teaching style is suitable for his students. It improves the learning and teaching process, checks students' performance easily, saves time and effort for teachers, and enables the teacher to assess a large number of students. Finally, it improves students' participation because there are fewer chances to miss an assessment. However, there are many obstacles to e-assessment. It is not free from drawbacks. There is a high risk of cheating and plagiarism (Farrah, & Al-Bakry, 2020). Students can use many tools to cheat, such as using the internet by opening multiple windows during the exam. Online assessment depends on online tools and the internet. Technology is not always dependable; there may be issues with connections or the internet, as well as power outages and other issues. To create and take an assessment, you must be computer literate (or know how to use a computer well). There is also a sense of isolation in e-assessment. Online assessments have many pros and cons. However, the training courses for Hebron university teachers on how to conduct e-assessment and give clear instructions to students during the exam can alleviate the cons of e-assessment.

As mentioned above, due to COVID-19, many most educational institutions have decided to adopt e-learning, but this shift to online delivery was not without problems in terms of readiness for e-learning, especially in the way of evaluating students. Many teachers face difficulty in conducting online exams. There is also a lack of adequate devices and equipment and a poor quality of internet at schools and universities. Therefore, this study aims to investigate the advantages and disadvantages of e-assessment and to explore Hebron university students' impressions and perceptions towards e-assessment. The findings of this study will be beneficial to raise the awareness among academic and administrative staff at Hebron University to suggest appropriate solutions to solve these problems, improve e- assessment and know the extent to which students are satisfied with e-assessment.

Literature Review

Advantages of Online Assessment

Universities adopted e-assessment in place of traditional assessment to develop a more accurate and faster method of evaluating students. The benefits of using e-assessment are discussed in this section.

The learning process has evolved since the introduction of e-learning and e-assessment. Several studies have reported numerous benefits of e-assessment, including enabling students to take their exams remotely (Forsyth and Heksieva, 2021, Alruwais et al., 2018) , giving immediate and beneficial feedback that improves the learning level more than paper-based exam (Astiandani & Anam, 2021; Kundu, Bej, 2021; Gilbert et al., 2011), saving teachers' effort and time. E-assessment can relieve teachers of the burden of assessing a large number of students (Yulianto & Mujtahed, 2021, Ridgway et al., 2004; Alruwais et al., 2018), helping students achieve their educational goals by encouraging higher-order thinking skills.



Assessment is described as "the heart of the student experience". It is important to create a suitable system for assessing students. Numerous studies have reported many benefits of e-assessment. Alruwais et al. (2018), conducted a study to recognize the advantages and obstacles of e-assessment. The results showed that universities adopted e-assessment instead of traditional ones to measure students through accurate and easy methods. This study showed the importance of e-assessment for students and teachers. Students prefer e-assessment because it is easier, faster, and more immediate than traditional assessment. It provides immediate feedback for them, improves their learning skills and provides flexibility for students to take their exams at any time and place. They also consider tests to be like games. Teachers can save their time and effort by using e-assessment because it helps teachers to assess many students easily and to develop the quality of giving feedback. Gilbert et al. (2011) conducted a study. The findings also showed that e-assessment increases students' motivation to enhance their performance.

Challenges of Online Assessment

E-assessment implementation in education faces some difficulties. Many studies have investigated the obstacles of e-assessment. One of the most reported obstacles is the risk of a bad internet connection and inadequate development of technical infrastructure (Forsyth and Aleksieva, 2021; Arif, 2020; Abduh, 2021; Yulianto & Mujtahed, 2021). Another challenge that faces both teachers and students is the lack of interaction, which affects their comprehension of the assessment process (Farrah & Jabari, 2020; Abduh, 2021; Zboun, & Farrah 2021; Forsyth & Heksieva, 2021). Moreover, cheating and plagiarism are revealed as disadvantages of e-assessment (Xu & Mahenthiran, 2016; Arif, 2020; Farrah, & Al-Bakry, 2020; Abduh, 2021). Finally, there is the difficulty in scoring and correcting open-ended questions, such as "explain things" (Ridgway et al., 2004; Alruwais et al., 2018).

Abduh (2021) set out a study to investigate teachers' views about e-assessment methods during the lockdown in a Saudi EFL context during COVID-19, types of online assessment, and the challenges that face teachers while assessing their students. The results showed that many teachers face serious problems and challenges in e-assessment. They face technological challenges and a lack of interaction between themselves and their students. Yilmaz (2017) showed in his study that the major problem in online assessment is that teachers cannot control cheating during online exams. Arif (2020) conducted a study to show the way that English language teachers implemented e-assessment and how they dealt with the obstacles that faced them in assessing students during COVID-19. There are many challenges in e-assessment, such as: cheating is easier and more difficult to detect, online assessment needs a reliable and organized framework, and the internet has poor connectivity. Alruwais (2018) et al. showed the challenges of e-assessment. Teachers face difficulty in scoring and assessing students' responses to open-ended questions (such as "discussion" and "opinion"), in evaluating a group job and in the unfamiliarity with using technology.

Teachers' Perspective of E-Assessment

Many changes happened in the world during the coronavirus, especially in the education sector. A large number of universities depend on online learning, so it was necessary to create an accurate method to measure students. In the teaching-learning process, teachers play a critical role. Different teachers hold different beliefs and perspectives towards e-assessment, so there are many studies conducted about teachers' views of e-assessment. Yulianto and Mujtahid (2021) conducted a study which aims to find out teacher practices and perspectives on online assessment during COVID-19. This study used an open questionnaire with 10 questions and online interviews using Whatsapp to collect the data. The questionnaire was conducted to cover two variables: the teachers' point of view and their practices of e-assessment. For each item, the participant was asked to answer an open-ended questionnaire. The main aim of conducting interviews was to help in getting more data. The data is presented as tables. This study was used at one of the universities in Surakarta, Indonesia. Overall, the findings revealed that most teachers consider online assessment very difficult because many problems arise when they use many applications and also, they face difficulty when monitoring students. On the other hand, they don't deny that online assessment is very useful during this pandemic. It enables the teacher to evaluate his students easily at any time and place, and it helps them assess the students' achievement.



Another study that showed teachers' views about online formative assessment during COVID-19 is [Astiandani and Anam \(2021\)](#) study. They employ a qualitative approach to measure EFL teachers' perception of their employment of e-assessment. This study used an open questionnaire and the participants were six Indonesian EFL teachers. Five of them were females, and one was male. The findings showed that four teachers have positive perceptions about online formative assessment, and the other two teachers have neutral opinions by expressing both negative and positive views towards e-assessment. The first group believes that formative assessment has many positive effects. First of all, it can correct the results of the test quickly and give prompt feedback to students. Second, it is very practical, especially in knowing and assessing students' understanding and competencies. Finally, it helps students train their honesty during tests. The other group showed neutral opinions about OFA. This was revealed during their views and responses. They think that OFA has many positives and negatives. OFA provides a variety of learning platforms that let students learn at any place and at any time, but sometimes students forget to do their assignments. OFA is very beneficial because it can measure students' responses and answers very easily, but it is very difficult to control students' honesty while taking tests.

Students' Perspective of E-Assessment

According to students' impressions of e-assessment [Kundu and Bej \(2021\)](#) conducted a study that was intended to investigate students' perceptions of e-assessment and their needs. This study used an online survey that consists of 40 questions to gain and measure primary data about students' perceptions of the online assessment. This study used a quantitative method. The participants were 200 Indian higher education students. The questionnaire was available to them for one month from March 30 to April 30. It consisted of 8 domains such as: perceived usefulness, perceived ease of use, compatibility, peer influence and superior influence, self-efficacy, resource facilitation, and support. The information was analyzed descriptively. The results of this study depend on the model of acceptance and usage of e-assessment (MAUE). It is clear that students' perception of the e-assessment is moderate. It depends on many things, such as their gender, academic level, and economic background. They showed better perception in the perceived ease of use, perceived usefulness compatibility, subjective norms, and self-efficacy domains, but this differed in other domains like awareness, resource facilitation, and IT support.

[Forsyth & Aleksieva \(2021\)](#) set out a study which aims to answer many questions about students' experiences of the forced introduction of e-assessment, their views, perspectives, and feelings about it. The study used quantitative research. The researchers collected the data during an online survey that was distributed to 1102 Sofia University students, but only 853 completed all the questions. Female students made up 71% of the participants. (46%) of participants are 21 years of age or less. Another 40% are between 22 and 30 years old, 7% are between 31 and 40 years old, and over 41 years old is 5%. The other two percent didn't share their age. The participants represent all 16 faculties of SU. The findings showed that the attitude of the participants towards e-assessment is dependent on the forms of assessments in terms of the quality of their interaction with their teachers and colleagues in the context of assessment, as well as on their technical equipment and the quality of connection. All students have a positive reaction to e-assessment from any place, and many of them feel calmer during e-assessment. The most important thing is that the disadvantages of e-assessment could be overcome through a suitable pedagogical design of e-assessment by organizing courses for online education.

[Hyland & O'shea \(2021\)](#) conducted a study to investigate and measure the impact of COVID-19 from mathematics students' point of view at university level in Ireland. The survey consists of 16 closed and open questions which cover three sections: e-assessment, teaching and learning, and personal experience. They advertised the survey through email. There were 263 participants from six universities. 93% of them were university students. All of the participants answer the whole question. The results showed that most students considered online assessment a fair tool. Online assessment feedback is a welcome addition for many students, but only 43% said they get feedback. They face technical difficulties during online exams, such as bad internet connections and laptop faults. Approximately a quarter of the participants (24%) did not have a suitable place to solve their online exams. In addition to that, some students claimed that there was not enough time to complete their E-assessment.

[Zou et al. \(2021\)](#) conducted a study about the effectiveness of EFL online teaching during the coronavirus. This study used questionnaires and semi-structured interviews. The participants were Chinese university teachers and students. The finding showed that online assessment can give more feedback. The main aims of using suitable



online assessment tools are to evaluate the teaching and learning process, use online platforms in to foster students' language development, and integrate the teaching platforms with content to foster students' comprehension.

Camacho et al. (2021) set out a study to collect data about the impacts of online teaching English. The researcher used quantitative and qualitative methods. There were 480 participants from three different universities. The finding showed that several things must be linked to achieve appropriate assessment tools, which include taking into consideration the class time, content, assignment, and target audience. The study in Jordanian universities showed that students have a positive impression of electronic assessment tools. They mentioned that exams during the Corona pandemic were fair and appropriate, but it is important to take into account the application of appropriate assessment tools for each course. For example, the sciences need to apply assessment tools on campus, not electronically.

Methodology

This section discusses the participants, the research design, the data collection instruments, and the data analysis process employed in this study. Finally, she outlines the finding and discussion.

Design of the study

This research employs a quantitative approach. It is a descriptive study. The data was collected through an online questionnaire with 40 question items to assess students' perception of e-assessment across eight domains: awareness domain (items 1–5), perceived usefulness domain (items 6–10), perceived ease of use domain (items 11–15), compatibility domain (items 16–20), peer influence and superior influence (items 21–25), self-efficacy domain (items 26–30), resource facilitation domain (31–40).

Participants

The target audience was English department students at Hebron University. The questionnaire was designed in Google Forms, a popular survey administration app that encourages paperless research work, to collect the necessary data for the investigation. A total of 64 students from different stages were given the survey. The participants were 55 females and 9 males. Their ages were between 19 and 24. 16 respondents were sophomores, 7 were juniors, and 37 were seniors. The students were active and helpful in filling out the online survey.

Instrument

This study used a descriptive quantitative approach to determine the extent to which e-assessment is used by English department students, as well as the domains that influence students' perception of its use. According to Creswell (2008), surveys are always appropriate strategies within quantitative approaches. An online survey was used in this study to gather relevant data to investigate the advantages and disadvantages of e-assessment, to investigate whether or not to use e-assessment in the future instead of traditional assessment, and to clarify Hebron University students' impressions and perceptions of e-assessment. The Likert-scale was used to indicate the degree of agreement and disagreement from 1 to 5, with the options of strongly agree, agree, neutral, disagree, and strongly disagree.

Administration of the Questionnaire

There are 40 items in the questionnaire that were filled out by 64 English Department students from different stages at Hebron University during the second semester of the academic year 2021–2022 to find out the students' impressions of e-assessment.

Procedure

The researchers published the questionnaire in the "English major students" group". Then they explained to them the purpose of the questionnaire. Students were asked to choose the best option that represents their perception of e-assessment. It took them 5–7 minutes to answer it. After that the researcher collected the data from



the Google and subjected it to analysis. The questionnaire was adopted and adapted from the study of Kundu and Bej (2021) after their official approval through email communication.

Reliability of the Questionnaire

The questionnaire's reliability coefficient was calculated. The result showed that the overall Cronbach Alpha Coefficient of the questionnaire is moderate ($r = 0.77$) indicating a good degree of reliability.

Finding and Discussion

The demographic characteristics of participants and their views towards e-assessment will be presented.

Section one: the demographic data.

Table 1. The demographic data: gender

Gender	Frequency	Percent
Male	9	14.1%
Female	55	85.9%
Total	64	100%

Regarding gender, table 1 shows that most of the participants were females (85.9%) and (14.1%) were males. This is common because the number of females is higher than males in the English Department at Hebron University and it also reflects the overall population of the university.

Table 2. demographic data: academic year

Level	Frequency	Percent
sophomore	18	28.1%
Junior	8	12.5%
Senior	38	59.4%
Total	60	100%

Regarding the academic year, table 2 shows that sixteen students (28.1%) were in their second year, seven students (12.5%) were in their third year and thirty-seven students (59.4%) were in their fourth year. This revealed that the most respondents were seniors.

Table 3. demographic data: age

Age	Frequency	Percent
19-20	22	34.4%
21-22	34	53.1%
23-24	8	12.5%
Total	64	100%



Regarding the age, (34.4%) of the students' age was between 19 and 20, (53%) of the students' age was between 21 and 22, and (12.5%) of the students' age was between 23 and 24. This shows that the majority of the students' ages were between 21–22.

Section 2: students' views towards e-assessment.

Table 4. Perception of e-assessment domains

	Perception of E-Assessment Domains	Mean
1	Compatibility domain	3.74
2	Awareness domain	3.71
3	Self-efficacy domain	3.57
4	Perceived usefulness domain	3.53
5	It supports domain	3.48
6	Perceived ease of use domain	3.48
7	Peer influence and superior influence domain	3.41
8	Resource facilitation domain	3.20
	Total	3.51

The total is moderate with a mean of 3.51. The domain that got the highest agreement is compatibility domain with a mean of 3.74. The lowest agreed domain is resource facilitation domain with a mean of 3.20.

Table 5. Students' views towards e-assessment

N	Statement	Mean	SD
27	I believe e-assessments can do things quickly that paper-based assessments can't.	4.22	1.657
9	I feel online exams are fairer than paper-pen exams and free from human errors.	4.05	.844
3	E-assessment has been a regular phenomenon in my college/university.	3.98	1.202
19	Online exams are easy to assess, time-saving and easy to evaluate.	3.91	1.191
1	I am well acquainted with e-assessment	3.89	1.653
33	I feel there are serious health and safety issues with online exams.	3.84	1.86206
2	I feel I am an expert in the e-assessment process.	3.83	1.032
36	I can use ICT tools e.g., computer, software, internet efficiently.	3.81	1.344
20	Being objective or multiple-choice type, e-assessment is unable to reflect my true level of knowledge	3.80	1.157
15	I feel problems in concentrating on the online questions.	3.75	1.141
18	Online exams will help me in preparing myself for online recruitment examinations.	3.75	1.054
16	E-assessment is appropriate for my subject area	3.66	1.263
5	I feel I am aware of the pros and cons of e-assessment.	3.66	.930
6	I feel online assessment is just as secure as paper-based assessment.	3.63	1.254
40	I feel I have adequate computer knowledge to face e-assessment-	3.58	1.206
17	Online exams don't just test my knowledge of the subject, but IT skills as well	3.58	1.245



13	I fear that e-assessment in my university will ruin my career.	3.56	1.413
21	During COVID my peers have adopted e-assessment with a compulsion	3.55	1.259
24	I was also comfortable with paper-pencil mode prior to COVID intrusion	3.52	1.069
38	I have a computer for personal use at my home	3.50	1.155
8	I feel there is less scope to adopt malpractices in e-assessment than with paper-based assessments	3.48	1.234
30	I believe online assessment should go hand-in-hand with e-Learning (e.g., using Dashboard)	3.45	1.234
26	I believe the potential for immediate feedback with online exams could help me learn more.	3.45	1.356
12	I can solve simple technical problems during ICTs use.	3.45	1.246
29	I believe by making quick assessment online exams provide help to the overall teaching-learning.	3.41	.921
22	My university offered e-assessment as the only option left with us during the pandemic.	3.41	1.003
23	In normal times I used to like the paper-pencil mode of assessment.	3.41	1.003
14	I feel more comfortable in the paper-pen mode of assessment than e-assessment.	3.37	1.248
10	I feel the technology used in online assessments is reliable from security concern	3.36	1.373
28	I believe e-assessment add value to my learning and future career	3.33	1.222
11	I feel stressed using a computer during the examination	3.31	1.194
39	I regularly use the internet, email, social networks, YouTube etc.	3.27	1.158
37	I feel I am not ready for a computer-based examination.	3.25	1.208
34	I feel online exams are more easily accessible than paper-based exams.	3.20	1.101
4	I am provided regular information on e-assessment by my college/university	3.19	1.180
25	COVID pandemic compelled me to make myself adopt with e-assessment.	3.19	1.082
35	I feel my college/university don't have adequate e-assessments infrastructure	3.17	1.189
7	I am confident that my grades for online assessments are secure.	3.17	1.363
31	E-assessments use less paper, which is important to me.	3.12	1.091
32	I feel technical problems make online exams impractical.	2.69	1.125

Table 5 shows that the perception of English department students towards e-assessment was at a moderate level. As the table shows, item number 27 got the highest rating ($m = 4.22$). This means that students are certain that e-assessments can do many things more quickly than traditional exams. They enable students to receive their results quickly, which reveals that online assessment is quicker to mark, especially in questions that require specific or short answers, such as true and false, multiple choice, and fill-in-the-blank questions. Item number 9 came in second place and received a very high rating ($M = 4.05$). This shows that most students believe that e-assessment is more accurate and devoid of human mistakes than traditional exams, because some teachers may make mistakes when they correct students' answers on paper-based exams, but in most online exams, the computer system corrects the responses automatically. This is in agreement with [Kundu and Bej \(2021\)](#), who found that e-assessment is more reliable and freer from human errors. Most EFL students think that e-assessment has become a common phenomenon. This is revealed in item 3 ($M = 3.98$). Many lecturers still conduct online exams even after COVID-19. Item 19 also got a high rating ($M = 3.91$). One of the e-assessment benefits is that it is easy to assess and evaluate



and time-saving. This is in agreement with (Singh, 2018, Knowly, 2020a), who found that both teachers and students benefit from online exams because it saves time and it is very easy. As the results indicate in item 1 ($M = 3.89$), most students are familiar with e-assessment. Regarding items 33, 2, 36, 20, 15, 18, They all got high ratings. Students feel that e-assessment has safety issues, especially during the pandemic ($M = 3.84$). They saw themselves as experts in the e-assessment process. They can use ICT tools. Item 20 and 15 indicate some disadvantages of e-assessment: that it is difficult to assess students' knowledge through it and there is a lack of concentration during e-assessment, which agrees with the study of Kundu and Bej (2021). Item number 18 ($M = 3.75$) also achieved a high agreement, which indicates that e-assessment enables us to help students in the future by preparing them for online recruitment exams.

Regarding the investigation, item 16 ($M = 3.66$) got a moderate rating. This was expected because many students in the English department face problems in some courses during online learning, such as linguistics and phonetics. However, other courses, such as literature courses, were better shown during Corona because teachers were able to use many sources through the internet, which enhanced students' comprehension of literature. Item 5 ($M = 3.66$) got a moderate rating that students were aware of the advantages and disadvantages of e-assessment. Also, students differ in their responses in considering e-assessment as secure as traditional assessment. This is revealed in item 6 ($M = 3.63$). Item numbers 17 and 40 got the same moderate rating ($M = 3.58$). 34.4% of the respondents agree that online exams not only measure their academic knowledge but also their IT skills and that e-assessment will ruin their career. The students' answers to items 21, 24, 38, 8, 30, 26, 12, 12, 29, 22, 23, 14, 10, 28, 11 were varied and moderate. Some students think that their peers are forced to adapt to online assessment during COVID-19 ($M = 3.55$). They were comfortable with traditional exams prior to the COVID pandemic ($M = 3.52$). They also used to like the paper-pencil mode of assessment ($M = 3.41$) and felt more comfortable in the paper-pen mode of assessment than in e-assessment ($M = 3.37$). It seems from item 38 that not all students have a personal computer ($M=3.50$). Some students believe that e-assessment provides less opportunity for mismanagement than paper-based tests ($M = 48$). Many students think that online assessment should go hand-in-hand with e-Learning ($M = 3.45$). Item 26 ($M = 3.45$) shows that immediate feedback helps some students learn more. This is in agreement with (Walet, 2012; Singh, 2019; Zlatovi et al. 2015). Hebron University offered e-assessment as the only option during the pandemic ($M = 3.41$). Certain students can solve simple technological problems ($M = 34.5$). Item 29 ($M=3.41$) indicates that some respondents believe that online exams aid the teaching-learning process by allowing for quick assessments. Item 10 ($M = 3.36$) shows a moderate rating. Students feel that online assessments are reliable. Some students think that e-assessment will benefit them in their learning and in their future career ($M = 3.33$). During the online exam, 56.3% ($M = 3.31$) of EFL students experience stress.

The items 39, 37, 34, 4, 25, 35, 7, 31, 32 got low ratings. EFL students don't regularly use the internet, email, social networks, YouTube, etc. ($M = 3.27$). They are also not ready for a computer-based examination ($M = 3.25$). In their opinion, online exams are not more accessible than paper-based exams ($M = 23$). Item 4 and 25 got the same low rating ($M = 3.19$). Students think that the English department and Hebron University don't give enough information and instructions for e-assessment. They think that coronavirus does not compel them to adopt e-assessment. Items 35 and 7 also have the same low rating ($M = 3.17$).

Table 6. Compatibility domain.

	Compatibility domain	Mean	SD
19	Online exams are easy to assess, time-saving and easy to evaluate.	3.91	1.191
20	Being objective or multiple-choice type, e-assessment is unable to reflect my true level of knowledge	3.80	1.157
18	Online exams will help me in preparing myself for online recruitment examinations.	3.75	1.054
16	E-assessment is appropriate for my subject area	3.66	1.263
17	Online exams don't just test my knowledge of the subject, but IT skills as well	3.58	1.245
		3.74	



Students feel that there is no adequate online assessment infrastructure at Hebron University. Students are unsure about the security of their online assessment grades. Item 31 (M=312) shows that students are not interested in the fact that e-assessments are environmentally friendly (use less paper). Item 32 got the lowest rating (M = 2.69). This shows that students believe that technical difficulties do not make online exams impractical. They don't think that the technical difficulty is one of the online assessment disadvantages.

Table 6 shows that the compatibility domain got the highest rating with a mean of 3.74. The highest mean in this domain was found in "Online exams are easy to assess, time saving and easy to evaluate " with a mean of 3.91. This indicates that students think that the best advantages of e-assessment are time-saving and easy to assess and evaluate. The second highest mean appears in "Being objective or multiple-choice type, e-assessment is unable to reflect my true level of knowledge" with a mean of 3.80. However, item 17 got the lowest mean of 3.58

Table 7. Awareness domain.

	Awareness domain	Mean	SD
3	E-assessment has been a regular phenomenon in my college/university.	3.98	1.202
1	I am well acquainted with e-assessment	3.89	1.653
2	I feel I am an expert in the e-assessment process.	3.83	1.032
5	I feel I am aware of the pros and cons of e-assessment.	3.66	.930
4	I am provided regular information on e-assessment by my college/university	3.19	1.180
		3.71	

Table 7 shows that the awareness domain is the second domain with a mean of 3.71. The highest item in this domain is "e-assessment has been a regular phenomenon in college/university "with the mean of 3.98. This indicates that many teachers at Hebron University still conduct online exams even after the pandemic. The second highest mean appears in item 1 "I am well acquainted with e-assessment" with a mean of 3.89. However, item 4 got the lowest mean of 3.19. This means that Hebron University should make an effort in providing clear instructions on online assessment to the students.

Table 8. Self-efficacy domain.

	Self-efficacy domain	Mean	SD
27	I believe e-assessments can do things quickly that paper-based assessments can't.	4.22	1.65
30	I believe online assessment should go hand-in-hand with eLearning (e.g., using Dashboard)	3.45	1.234
26	I believe the potential for immediate feedback with online exams could help me learn more.	3.45	1.356
29	I believe by making quick assessment online exams provide help to the overall teaching- learning.	3.41	.921
28	I believe e-assessment add value to my learning and future career	3.33	1.222
		3.57	

Table 8 shows that the self-efficacy domain is considered as the third domain with the mean of 3.57. The highest mean in this domain was found in " I believe e-assessments can do things quickly that paper-based assessments can't "with a mean of 4.22. This item got the highest rating in this study. This indicates that students think that the best and great advantage of e-assessment is it can do things quickly more than paper-based exam. The second highest mean appears in "I believe online assessment should go hand-in-hand with eLearning (e.g., using Dashboard)" with the mean of 3.45. However, item 28 got the lowest mean of 3.58.



Table 9 Perceived usefulness domain.

	Perceived usefulness domain	Mean	SD
9	I feel online exams are fairer than paper-pen exams and free from human errors.	4.05	.844
6	I feel online assessment is just as secure as paper-based assessment.	3.63	1.254
8	I feel there is less scope to adopt malpractices in e-assessment than with paper-based assessments	3.48	1.234
10	I feel the technology used in online assessments is reliable from security concern	3.36	1.373
7	I am confident that my grades for online assessments are secure.	3.17	1.363
		3.53	

Table 9 shows that the perceived usefulness domain is considered as the fourth domain with a mean of 3.53. The highest mean in this domain appears in item 9 with the mean of 4.05. This indicates that most students consider e-assessment fair. This item got the second highest rating in this study. The second highest mean in this domain is found in "I feel online assessment is just as secure as paper-based assessment" with a mean of 3.63. However, item 7 got the lowest mean of 3.17.

Table 10 IT support domain.

	IT support domain	Mean	SD
36	I can use ICT tools e.g., computer, software, internet efficiently.	3.81	1.344
40	I feel I have adequate computer knowledge to face e-assessment-	3.58	1.206
38	I have a computer for personal use at my home	3.50	1.155
39	I regularly use the internet, email, social networks, YouTube etc.	3.27	1.158
37	I feel I am not ready for a computer-based examination.	3.25	1.208
			3.48

Table 10 indicates that IT support domain is the fifth domain with the mean of 3.48. The highest mean in this domain appears in item 36 "I can use ICT tools e.g., computer, software, internet efficiently" with a mean of 3.81. The second highest mean in this domain is found in "I feel I have adequate computer knowledge to face e-assessment" with a mean of 3.58. However, item 37 got the lowest mean of 3.25.

Table 11 Perceived ease of use.

	Perceived ease of use domain	Mean	SD
15	I feel problems in concentrating on the online questions.	3.75	1.141
13	I fear that e-assessment in my university will ruin my career.	3.56	1.413
12	I can solve simple technical problems during ICTs use.	3.45	1.246
14	I feel more comfortable in the paper-pen mode of assessment than e-assessment.	3.37	1.248
11	I feel stress using a computer during examination	3.31	1.194
			3.48

Table 11 indicates that perceived ease of use is also considered as the fifth domain with a mean of 3.48. The highest mean in this domain appears in item 5 "feel problems in concentrating on the online questions." with a mean of 3.75. The second highest mean in this domain is found in "I fear that e-assessment in my university will



ruin my career" with the mean of 3.56. However, the item that got the lowest mean in this domain is item 11 with a mean of 3.31

Table 12 Peer influence and superior influence domain.

	Peer influence and superior influence domain	Mean	SD
21	During COVID my peers have adopted e-assessment with a compulsion	3.55	1.259
24	I was also comfortable with paper-pencil mode prior to COVID intrusion	3.52	1.069
22	My university offered e-assessment as the only option left with us during the pandemic.	3.41	1.003
23	In normal times I used to like the paper-pencil mode of assessment.	3.41	1.00
25	COVID pandemic compelled me to make myself adopt with e-assessment.	3.19	1.082
			3.41

Table 12 shows that peer influence and superior influence is the sixth domain with the mean of 3.41. The highest mean in this domain appears in item 21 "During COVID my peers have adopted e-assessment with a compulsion" with a mean of 3.55. The second highest mean in this domain is found in "I was also comfortable with paper-pencil mode prior to COVID intrusion" with a mean of 3.52. However, the item that got the lowest mean in this domain is item 25 with a mean of 3.19.

Table 13 Resource facilitation domain.

	Resource facilitation domain	Mean	SD
33	I feel there are serious health and safety issues with online exams.	3.84	1.86206
34	I feel online exams are more easily accessible than paper-based exams.	3.20	1.101
35	I feel my college/university don't have adequate e-assessments infrastructure	3.17	1.189
31	E-assessments use less paper, which is important to me.	3.12	1.091
32	I feel technical problems make online exams impractical.	2.69	1.125
		3.20	

Table 13 shows that the resource facilitation domain got the lowest rating with a mean of 3.20. The highest mean in this domain appears in item 3 "I feel there are serious health and safety issues with online exams." with a mean of 3.84. The second highest mean in this domain is found in "I feel online exams are more easily accessible than paper-based exams." with a mean of 3.20. However, the item that got the lowest mean in this domain and the study is item 32 with a mean of 2.69.

Conclusion

In conclusion, this study points to the merits and demerits of e-assessment. As we all know that online learning continues to simplify the teaching and learning process, especially during coronavirus pandemic. E-assessment also is important to ensure the educational continuity and to assess students. Students' opinions of e-assessment were of moderate level. Of the eight domains investigated, EFL students showed better views in the Compatibility domain, awareness domain, self-efficacy domain, perceived usefulness domain, IT support domain, perceived ease of use domain. The highest agreed domain is compatibility domain. This domain shows some advantages of e-assessments. E-assessments facilitate the process of assessing and evaluating students, consider as time-saving and prepare students for online recruitment exams. However, students made a sorry impression in domains like, peer influence and superior influence domain and resource facilitation domain. The study found that



the major problem that face students that is Hebron University should make efforts to guide their students and to provide them with the proper instructions for e-assessment. This will help in reducing the problems that face some students.

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