

Perception of University Students toward the Effectiveness of E- Learning during Covid-19 Pandemic

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Abstract

The COVID-19 pandemic has transformed education systems throughout the planet from traditional courses to online learning. **Aim:** this study aimed to explore the perception of university students toward the effectiveness of E- Learning during Covid-19 pandemic. **Design:** An exploratory descriptive research design was utilized to conduct this study. **Subjects:** by using stratified random sampling technique eight hundred and seventy-five (857) fourth year students were selected. **Tools.** Data was collected using an electronic questionnaire that consists of four parts: part I: Socio-demographic characteristics of the students, Part II: perception of students towards E-learning via Microsoft Teams application, Part III: challenges facing the students and their suggestions to overcome them. **Results:** The rate of the student's agreement on the perceived usefulness, behavioral intention and perceived ease of use was (72.6%,64.7%,63.7%). The highest challenge reported by the students was cost of the internet (66.5%) followed by unavailability of the internet at home (56.8%), absence of collaboration between the students in the web-based class (44.2%) and limited technology skills of the students (40.8%).**Conclusion.** This study sheds the light on the challenges and factors affecting the perception of the college students towards E-learning as a newly adopted teaching strategy. So, it will assist to create an effective plan for E-learning successful implementation and view innovative technology as a good step to progress and evolution. **Recommendations:** use of offline downloadable learning materials would overcome the challenges related to the variable quality of internet access in the country.

Keywords: COVID-19 pandemic, perception, Microsoft Teams, learning platform

Introduction

The COVID-19 has resulted in monstrous interruption of the scholastic field. The battle to progress quickly to electronic learning (e-learning) settings has affected instructors, universities, and students at all academic levels. The quantity of schools and colleges around the world, giving distance learning programs has risen drastically and numerous nations have seen a flood in distance learning. The United Nations Educational, Scientific and Cultural Organization (UNESCO) announced that greater than one billion students (80% of the worldwide student's populace) have been influenced by the pandemic (UNESCO, 2020).

E-learning devices have assumed an essential role during Covid-19, helping schools and colleges to make learning easier during lockdown of schools and universities (Subedi, et al 2020). Students and staff readiness for this new teaching strategy should be supported while adjusting to the new changes. Open

minded learners rapidly accommodate with the new learning platform, whereas close minded learners find it hard to adjust to change. There is no one learning approach that can fit all online courses. There are various subjects with different needs that require several online learning approaches (Doucet, et al 2020). Moreover, physically disabled students find web-based learning as a golden opportunity to achieve their dreams as they can freely participate in the virtual learning environment (Basilaia, and Kvakvadze, 2020).

There are several online learning platforms, Microsoft Teams is considered to be one of the most effective platforms. This application can be downloaded easily on mobiles and personal computers (Microsoft 2018). Microsoft Teams is a cloud application that provide videoconferencing, group discussion, sharing files, and conversations such as other social media (Bailey, 2018, Tsai, 2018, Songsore, 2019,

Montgomery, 2019, Henderson, et al., 2020, and Ilag, 2020).

Educators can send assignments to small or large groups of students or the whole class through Microsoft Teams assignment function (Pretorius, 2018 and Allison, & Hudson, 2020). Lecturers reported that they could create assignments to every student in the online classes according to the student's academic capabilities and learning style. Furthermore, instructors can take advantage of Microsoft Teams features like scheduling meetings, recording lectures and meetings, sharing meetings links to the attendees, sharing documents, sharing videos, conversation with the students in the chatting box, sharing the recorded lectures, controlling the presenters of the sessions, and taking the absenteeism of the students several factors can assist the students to achieve their learning goals such as learning environment, interaction with teacher and colleagues, and also the course materials (Fortune, et al 2011).

Students and educational foundations worldwide have acknowledged and preferred E-learning platform for several reasons like flexibility of learning, ease of access and controlled learning environment. On the other hand, online learning has several demerits such as network issues, lack of social interaction, lack of communication skills, require time management and self-motivation skills (Sá, & Serpa, 2020). Before COVID-19 pandemic, online learning was not the conventional teaching strategy adopted by the educational institutions. Although, during COVID-19 most of the academic foundations adopted E-learning to facilitate learning for the students (Mahajan, 2018). Furthermore, various learning platforms are being investigated by educators to bring greatest conceivable simplicity for their learners (Nassoura, 2020).

Indeed, as online learning is a novel teaching platform, learners and educators do their best to accommodate with this recent strategy. Hence, it is very important to investigate the opinions of the students and the educators of the new teaching platform and also determine the obstacles facing them and their recommendations to solve these troubles (Bali & Liu, 2018). Therefore, this study aimed

to investigate the perception of students towards the effectiveness of E-learning during COVID-19 pandemic.

Significance of the study

Colleges, educators and students have been affected by the COVID-19 pandemic and the Egyptian ministry of higher education emphasized the necessity of E-learning implementation in the universities to facilitate learning process for the learners. However, the Egyptian universities had no previous experience in digital learning platforms and not trained for utilization of this novel teaching strategy (Zaharah, Z et al 2020). Consequently, the present study aimed to investigate the perception of university students toward the effectiveness of E-learning during The COVID-19 pandemic. Moreover, the findings of the current study might assist for successful implementation of online learning in the upcoming years.

Aims of the Study

Assess the perception of university Students toward the effectiveness of E-Learning during Covid-19 pandemic

- 1) Explore the challenges facing the students while using E-learning via Microsoft Teams platform
- 2) Identify the students' suggestions to overcome the encountered challenges

Research questions

- 3) How do students perceive the effectiveness of E-Learning during Covid-19 pandemic?
- 1) What are the challenges facing the students while using Microsoft Teams platform?
- 2) What are the student's suggestions to overcome the encountered challenges?

Materials & Methods

Materials

Research design

An exploratory descriptive research design was utilized to conduct this study.

Setting:

The study was conducted in three faculties in Damanhour University namely (Nursing, Education, and early childhood faculty).

Subjects:

Eight hundred and seventy-five (857) fourth year students from the previous setting were selected and who fulfill the following inclusion criteria:

- Willing to take part in the study
- Enrolled in the fourth year (Academic year 2020-2021)
- Used Microsoft teams' platform application in E-learning

Sample size:

The sample size was calculated by using proportional allocation 25% based on the total number of students of each randomly selected faculty. This resulted in minimum required sample size of (857) students as showed in the table (Table I)

Setting	Total Number of fourth year students	Sample size (25%)
1. Faculty of Nursing	324	81
2. Faculty of Education	2852	713
3. Faculty of Early Childhood	250	63
Total sample size	857	

Source: Department of Learning and Students' Affairs, Damanhour University (2021).

Sampling technique:

By using proportional allocation technique, the following steps were done:

- All Damanhour university faculties were divided into two groups (scientific, 5 faculties and literature, 6 faculties) by using stratified random sampling technique.
- One faculty from scientific faculties and two faculties from literature faculties were chosen randomly using lottery method to compose the three faculties namely (Nursing, education, and early childhood faculty) representing setting of the study.
- By using proportional allocation 25% of the total of fourth academic year students in each randomly selected faculty, a total

number of 857 fourth year students were chosen. As the fourth academic year students were using this platform science the previous year.

Data Collection Tools:

To attain study aims and answer the research questions, an electronic questionnaire was created by the researchers after reading the updated literature. It included the following parts:

Part I: Socio-demographic Characteristics and data about online of the Students such as age, sex, place of residence, income, marital status, Frequency of internet use/week, having university email, Hours of daily internet use, Previous online courses, Availability of internet at home, Devices used for E-learning.

Part II: perception of students towards E-learning via Microsoft Teams application. Technology acceptance model was utilized as a framework to explore the perception of the students. It consists of 18 items across three dimension: perceived ease of use (6 items), behavioral intention (6 items). Perceived usefulness (6 items), Each item was rated on a five point likert scale where 1 = strongly disagree, 2=disagree, 3= neutral, 4= agree, 5=strongly agree. the maximum score was 90 and the minimum was 18 (Davis, 1989).

Part III: challenges facing the students and their suggestions to overcome them. This part included open ended questions about the challenges and the suggestions.

Methods

1. Formal letter from the Dean of Nursing Faculty was directed to the department of learning and students' affairs at Damanhour University to notify them about the aims of the study and to take their approval to carry out the study in the selected faculties.
2. An official letter from the Faculty of Nursing was directed to the deans of the selected faculties to notify them about the study aims and to take their permission to conduct the study.
3. An online structured questionnaire was created using Microsoft office form. The researchers sent the questionnaire link to the students through various platforms such as (university emails, Facebook and WhatsApp)

4. Validity of the data collection tools was checked by five community health nursing experts. Modifications were done according to their recommendations.
5. Reliability of the data collection tool was tested utilizing Cronbach's alpha coefficient test ($\alpha = 0.85$) which indicates a high degree of reliability.
6. A pilot study was done on 10% of the sample (85 students) out of the sample so as to ensure clarity, applicability and comprehension of the study tools and to detect the obstacles that might impede the data collection process.
7. Data collection took three months from May 2021 to July 2021.

Statistical analysis

Statistical Package for Social Science (SPSS/version 20) was utilized for data investigation. Descriptive statistics like count, percentage, standard deviation and arithmetic mean were utilized to summarize data. Logistic regression analysis was utilized to determine factors affecting the student's perception. Statistical significance cut-off value (P-value set at 0.05).

Ethical considerations:

- The deans of the selected colleges have obtained written permission to collect student data.
- After explaining the study objectives, written online consent was obtained from each student to participate in the study and it was ensured that the data collected will only be used for the purpose of the study.
- Confidentiality and anonymity of students' response were ensured by using code numbers contrary to names.

Results

Table (1): reveals the socio-demographic traits of the students. The table portrays that the majority of the students (92.9%) aged from 22 to less than 24. Concerning sex, the table illustrate that slightly less than two thirds (63.4%) of the students were female. Regarding marital status, the majority of the students (93.1%) were single. In relation to place of residence, the table portrays that more than three quarters (78.7%)

of the students were living in rural areas. As regards to the family income, the table shows that the vast majority of the students (99.4%) had not enough income. Moreover, the table conveys that more than three quarters (89.3%) of the students did not have internet facility at their home. Furthermore, the vast majority (95.3%) of the students didn't take online courses before COVID-19 pandemic. The table also shows that the vast majority (94.6%) of the students used the mobile phone to access the online classes. Slightly less than three quarters (74.8%) of the students had poor computer knowledge and skills.

Table (2): portrays the perception of the students towards E-learning via Microsoft Teams. Regarding perceived usefulness domain, more than two thirds (67.5 %) of the students agreed that using Microsoft Teams in their studies enables them to accomplish tasks more quickly. Additionally, more than one third (36.2%, 45.4% respectively) of the students agreed that using Microsoft Teams improves their study performance and was useful in their study. Moreover, less than one third (33.7%, 29.2% respectively) agreed that using Microsoft Teams in their study increases their productivity and also enhance the effectiveness of their study. Furthermore, slightly more than half (53%) of the students strongly agreed that using Microsoft Teams makes it easier to do their studies. In relation to perceived ease of use, it is clear from the table that (68.8%, 31.1%, 37.4%, 28% respectively) agreed that Microsoft Teams was easy to learn, easy to do what they wanted it to do, flexible to interact with and easy to become skillful at using it. In addition, less than half (49%, 35.5 % respectively) of the students strongly agreed that interaction with Microsoft Teams was clear and understandable and also easy to use. With respect to behavioral intention, the table illustrate that slightly more than two fifth (40.7%) of the students intend to use Microsoft Teams in the future. Also, more than half (57.6%) of the students will recommend online learning via Microsoft Teams to others.

Figure (1): distribution of students according to the overall score of perceived usefulness of Microsoft Teams

It is clear from the figure that slightly less than three quarters (72.6%) of the students

strongly agreed on the perceived usefulness of Microsoft Teams.

Figure (2): distribution of students according to the overall score of perceived ease of use of Microsoft Teams.

The figure reveals that slightly less than two thirds (63.7%) of the students strongly agreed on the perceived ease of use of Microsoft Teams.

Figure (3): distribution of students according to the overall score of behavioral intention towards Microsoft Teams.

The figure demonstrates that slightly less than two thirds (64.7%) of the students strongly agreed that they intend to utilize the Microsoft Teams in the future.

Table (3): presents the challenges facing the students while using Microsoft Teams. As clear from the table, cost of the internet was reported by the highest percentage (66.5%) of the students, followed by unavailability of the internet at home (56.8%), lack of communication between the students in the virtual classroom (44.2%) and limited technology skills of the students (40.8%).

Table (4): depicts suggestions of the students to overcome the encountered challenges. It is evident that Ministry of Higher Education should communicate with the ministry of communication to make the internet cheaper for the students was suggested by the highest number of the students (49.3%), followed by provision of adequate number of IT staff to respond to the students' inquiries immediately (39.8%), scheduling several times for the same online exam (29.6%) and repeating lectures explanation at different times (27.5%).

Table (5): conveys logistic regression analysis for determining Socio-demographic factors affecting the perception of students towards the Microsoft Teams. The model included (age, sex, marital status, place of residence, availability of internet facility at home, previous online courses, tools used to access online classes and computer knowledge and skills) among which age, sex, and marital status were found to be statistically significant.

Table (1): Distribution of the students according to their socio-demographic traits and data about online:

Socio-demographic characteristics	(n =857)	
	No.	%
Age in years		
From 22 to less than 24	796	92.9
From 24 and more	61	7.1
Mean ± SD.	22±5.5	
Sex		
Male	314	36.6
Female	543	63.4
Marital status		
Single	798	93.1
Married	59	6.9
Place of residence		
Rural	675	78.7
Urban	182	21.3
Income		
Enough	5	0.6
Not enough	852	99.4
Availability of internet at home		
Yes	92	10.7
No	765	89.3
Previous online courses (before COVID-19)		
Yes	40	4.7
No	817	95.3
Tools used to access online classes		
Mobile phone	811	94.6
Tablet	9	1.1
Desktop computer	20	2.3
Laptop	17	2

Table (2): Distribution of the Students According to Their Perception towards the Effectiveness of E-learning via Microsoft Teams

	Items	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree	
		No	%	No	%	No	%	No	%	No	%
	Perceived usefulness										
1.	Using Microsoft Teams in my studies enables me to perform tasks extra quickly	24	2.8	32	3.7	20	2.3	578	67.5	203	23.7
2.	Using Microsoft Teams improves my study performance	99	11.6	87	10.1	274	32	310	36.2	87	10.1
3.	Using Microsoft Teams in my study increases my productivity	176	20.6	199	23.2	110	12.8	289	33.7	83	9.7
4.	Using Microsoft Teams enhances the effectiveness of my study	89	10.4	199	23.2	210	24.5	250	29.2	109	12.7
5.	Using Microsoft Teams makes it easier to do my studies	0	0.0	74	8.6	119	13.9	210	24.5	454	53
6.	I have found Microsoft Teams useful in my study	0	0.0	0	0.0	176	20.5	389	45.4	292	34.1
	Perceived ease of use										
7.	Learning to apply Microsoft Teams turned into smooth for me	0	0.0	5	0.5	58	6.9	590	68.8	204	23.8
8.	Microsoft Teams enable me to upload and download files smoothly	78	9.1	190	22.2	210	24.5	267	31.1	2	13.1
9.	My interaction with Microsoft Teams was clear and understandable	0	0.0	78	9.1	119	13.9	240	28	420	49
10.	I found Microsoft Teams to be flexible to interact with	78	9.1	117	13.6	240	28	320	37.4	102	11.9
11.	It was easy for me to become skillful at using Microsoft Teams	90	10.5	87	10.2	230	26.8	240	28	210	24.5
12.	I found Microsoft Teams easy to use	120	14	30	3.5	176	20.5	227	26.5	304	35.5
	Behavioral intention										
13.	I intend to use online learning via Microsoft Teams regularly in the future	0	0.0	0	0.0	197	23	311	36.3	349	40.7
14.	I will recommend online learning via Microsoft Teams to others	0	0.0	0	0.0	129	15.1	234	27.3	494	57.6

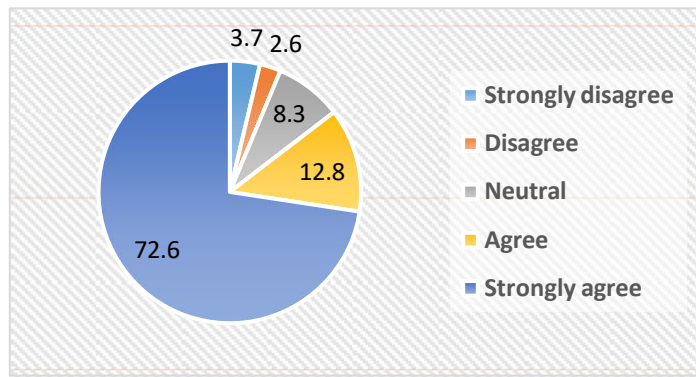


Figure (1): distribution of students according to the overall score of perceived usefulness of Microsoft Teams.

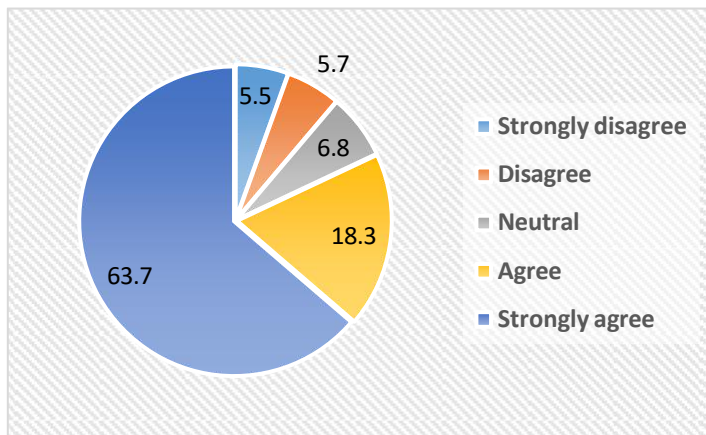


Figure (2): Distribution of students according to the overall score of perceived ease of use of Microsoft Teams.

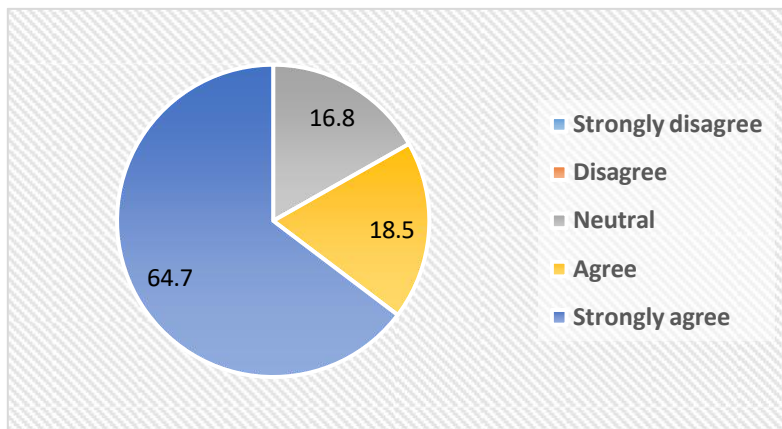


Figure (3): distribution of students according to the overall score of behavioral intention towards Microsoft Teams.

Table (3): Distribution of The Students According to Challenges facing them while using Microsoft Teams

Challenges	(n =857)	
	No.	%
No challenges	30	3.5
Unstable internet connectivity	130	15.2
Lack of sufficient training to use digital platforms	126	14.7
Lack of suitable online environment at home (e.g. presence of children, other family members)	145	16.9
Difficulties in class materials downloading	245	28.6
Lack of immediate feedback from the lecturers	23	2.7
Online exams are more difficult for students	216	25.2
Limited technology skills of the students	350	40.8
Technical problems during the online class	137	15.9
Unavailability of internet at home	487	56.8
Limited participation of students during lectures	239	27.9
Electricity troubles that leads to disconnection of the internet	213	24.8
Lack of communication between students in the virtual classroom	379	44.2
Cost of internet	570	66.5
Slowness of network during the online class	210	24.5
Lack of typing skills to deal with the online class	127	14.8
Delay in submitting assignments due to internet troubles	345	40.2

Table (4): Distribution of The Students According To their suggestions to overcome the challenges encountered

Suggestions	(n =857)	
	No.	%
Conducting several training workshops for the students about Microsoft Teams application	236	27.5
Provision of adequate number of IT staff to respond to the students inquiries immediately	341	39.8
Ministry of higher education should communicate with the ministry of communication to make the internet cheaper for the students	423	49.3
Provision of written guidance for the students to help them to deal with the platform	231	26.9
Sufficient training of the staff to be able to help the students to solve technical problems during the online class	139	16.2
Scheduling several times for the same online exam	254	29.6
Repeating lectures explanation at different times	236	27.5
Providing the students with CD containing all the course materials at the end of the semester	127	14.8
Extending the duration of assignment submission until all the students could submit	218	25.4
Conducting practical workshop for the students about computer skills	129	15

Table (5): Socio-demographic factors and online data affecting the perception of students toward E-learning via the Microsoft Teams (logistic regression analysis)

Items	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Age (From 22 to less than 24)	0.229 (0.053–0.986) *	9.889 (9.717–1.007) *
Sex (male)	0.250 (0.033–1.891) *	0.011 (0.000–0.254) *
Marital status (single)	5.543 (2.468–12.450) *	4.248 (8.477–0.254) *
Place of residence	2.788 (1.032–7.528)	1.029 (0.241–4.388)
Availability of internet at home	1.406 (0.397–4.984)	1.491(0.259–8.562)
Previous online courses	1.406 (0.397–4.984)	1.029 (0.241–4.388)
Tools used to access online classes	1.306 (0.397–4.984)	1.490 (0.259–8.562)

* P ≤ 0.05 (significant)

Discussion

Online learning has been adopted by various higher education foundations in developing nations in the past decade, so it is not viewed as a novel strategy (**Bhuasiri et al 2019**). Nevertheless, this strategy has not been adopted by all nations and cultures (**Hodgkinson- William, et al., 2018**). Additionally, there was unanticipated shift to E-learning since the world health organization (WHO) announcement of the covid-19 pandemic. Furthermore, the vague future concerning the end of the pandemic resulted in massive decency of universities on online learning (**Goldschmidt, 2020**).

Egypt faced steady obstacles in shifting conventional education system to online learning. A unique pressing challenge was converting traditional courses to electronic one (**Rapanta, et al., 2020**). There are several factors affecting the success of E-learning in the educational institution. Hence, successful implementation of E-learning require continuous evaluation in order to ensure its effectiveness and satisfaction of the students (**Al-Fraihat, et al., 2020**). So, the aim of the present study was to investigate the perception of the university students towards E-learning during COVID-19 pandemic.

With respect to the socio-demographic characteristics and data of online for the studied sample, the present study illustrated that the majority of the students aged From 22 to less than 24. Concerning sex, slightly less than two thirds of the students were females. Regarding marital status, the majority of the students were single. Additionally more than three quarters of the students were living in rural areas. Moreover, the vast majority of the students used the mobile phone to access the online classes. These findings were similar to the study conducted in Menoufia University to identify the E-learning obstacles faced nursing students by **Diab and Elgahsh (2020)**. Furthermore, more than three quarters of the students did not have internet facility at their home. This might be attributed to their residence in rural areas whereas there various difficulties in the internet access in comparison to urban areas. In contrast, the study conducted by **Ismail et al (2020)** in Tanta University to

explore E-learning barriers facing nursing students revealed that the majority of the students had internet at their own house. This disparity could be attributed to variation in socioeconomic status of the studied sample in the present study and the subjects of the other study.

Lately, several researches have been conducted to investigate the perception of the students on the effectiveness of online learning and the obstacles facing them (**Armstrong, 2011** and **Biswas, 2020**). National Center for Education Statistics has recently reported that the need for online learning has been grown. Various researches indicated that the majority of the students installed in online learning are satisfied with this innovative strategy. Although, studies illustrated that learners perception is influenced by several factors like learning style, sex, age, computer knowledge and skills (**Shrestha et al 2019; Salloum et al 2019, and Pérez- aérez, et al., 2020**).

In the current study, the application of the technology acceptance model (TAM) on the university students showed that a most of the students strongly agreed with the perceived usefulness of online learning which means that university students agree that E-learning via Microsoft Teams is essential for learning process progress. This in agreement with the the study conducted to investigate perception of the students toward distance learning during COVID-19 in India by **Khan et al (2021)**. On the other hand, these results disagreed with the study done in Malaysia by **Poon (2014)** who found that their respondents at different colleges were dissatisfied with distance learning as a teaching strategy and justifying this perception to various reasons such as limited feedback of the students, internet troubles, limited interaction between the students and the instructors, technical problems and learning style of learners (**Hong, et al., 2013**).

Pertaining to perceived ease of use, the current findings revealed that slightly less than two thirds of the students strongly agreed on the ease of use of Microsoft Teams. Similar findings were found in the study conducted in Indonesia by **Rojabi (2020)** and the study done in Zagazig by **Zalat, et al., (2021)** who found

that the majority of the studied sample agreed on the smooth use of E-learning via Microsoft Teams. However, these findings were contradicted with the study done in Kingdom of Saudi Arabia by **Chokri (2012)** who reported that majority of the studied sample disagreed on the ease of uses of E-learning. These heterogeneous perceptions could be due to illiteracy with the online learning platform, various technological skills and knowledge of the respondents which shed the light on the need for continuous training workshops on the utilization of several digital learning platforms for facilitating the activities of E-learning.

With respect to behavioral intention, the present study showed that slightly less than two thirds of the students strongly agreed that they intend to utilize E-learning via Microsoft Teams in the future and will recommend it to others. This is in the same line with the results of other studies conducted by **Kashoob, & Attamimi (2021)** and **Huang et al (2021)**.

Student's perception towards online learning is fundamental to their willingness and satisfaction with this innovative teaching strategy. Therefore, it is important to evaluate E-learning readiness before the implementation of it (**Suri & Sharma 2013**).

Many factors affecting how the students perceive online learning and are often related to its implementation (**Pawlyn, 2012**). Additionally, several problems can stem if online learning doesn't match with the learners characteristics such as learning style, sex, limited technological knowledge and skills and low motivation. Also, readiness of the students, availability of internet facility at home and ease of access to technologies plays an important role (**Popescu, 2012 and Tagoe, 2012**).

In relation to factors affecting the perception of students towards the E-learning via Microsoft Teams, the multivariate logistic regression analysis revealed that age from 22 to less than 24 is one of the most significant factors affecting the perception of the students. This might be attributed to the fact that younger students generally utilizing technology than the older, which would enhance their capabilities and willingness to use online learning strategy. Otherwise, the current study is contradicted with the study conducted in Libya to explore

factors affecting the student's attitude toward E-learning by **Ramadan (2019)** who found that there was no significant association between age of the studied sample and their perception toward E-learning. Also, the present study demonstrated that male gender is a significant factor. However, this result disagreed with **Jan and Mattoo (2018)** who found that gender has no effect on the perception of the studied sample. Furthermore, the current study showed that single marital status is a significant factor influencing the perception of the students. This could be attributed to the fact that single students have more free times than the married one which enable them to attend training workshops and to read more about E-learning. Similar results was reported from the study conducted by **Rafiq (2020)**.

Regarding the challenges encountered by the students, the present study demonstrated that the vast majority of the students experienced various challenges during the online learning. This could be attributed to the student's place of residence as the results revealed that most of them were living in rural areas. People in rural areas face several difficulties with the internet facility in comparison to those in urban areas. This is congruent with the study done in Indonesia by **Amir et al (2020)** who found that most of the studied sample experienced challenges during distance learning.

Moreover, the current study illustrated that cost of the internet, unavailability of internet facility at home, difficult communication between the students in the virtual class, limited technology skills of the students, difficulties in class materials downloading and limited participation of students during lectures were the commonest challenges reported by the students. This comes in line with studies carried out by **Ismail (2020), Olum et al (2020), Mpungose (2020), Kaisara and Bwalya (2021)**.

Regarding the student's suggestions to overcome the challenges related to E-learning via Microsoft Teams, the present study revealed that nearly half of the students suggested that the Ministry of Higher Education should communicate with the ministry of communication to make the internet cheaper for

the students. Additionally, nearly two fifth of the students suggested provision of adequate number of IT staff to respond to the students' inquiries immediately. Moreover, less than one third of the students suggested scheduling several times for the same online exam and repeating lectures explanation at different times. A little bit different picture was found in the study conducted by **Abozeid, Abdelaal (2021)** who reported that most of the respondents suggested organizing training courses for faculty teaching members and solving problems related to students' Email.

Conclusion

The present study concluded that:

The present study illustrated that most of the students strongly agreed with the perceived ease of use and usefulness of Microsoft Teams and also have the intent to utilize it in the future. The highest challenge facing the students was the cost of the internet.

Recommendations:

Based on the findings of this study, the following recommendations are proposed:

- Implementation of several training workshops for the students on how to deal with digital learning platforms
- Training workshops for the instructors to enable them to solve the student's technical problems
- The Ministry of High Education should find a way to make the internet cheaper for the university students.
- Provision of adequate number of staff in the IT unit in each faculty to answer the student's inquiries about digital learning platforms.
- In the future, more studies with a large number of participants should be conducted.
- Providing alternatives for the students who have difficulties with downloading the course materials such as CD containing all lectures recordings.
- Division of students into small groups to facilitate interaction during the online classes
- Researches are required to investigate the attitude of the faculty staff toward blended learning and to explore the challenges facing them.

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