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The Impact of Online Learning on the Female MA TESOL Students' Academic Performance during the COVID-19 Pandemic

Ghadi Al Wahhabi, Baraa A. Rajab

English Language Institute, King Abdulaziz University, Jeddah, Saudi Arabia
Email: galwahhabi@gmail.com, brajab@kau.edu.sa

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Abstract

This study investigates the impact of online learning on postgraduate students' academic performance, which is reflected in their GPA. A survey questionnaire was used to gather quantitative data from 36 participants. The quantitative data were analyzed using SPSS. The results show that there is a statistically significant difference between face-to-face and online learning, which has an impact on the MA TESOL students' academic performance in the Saudi EFL context. Based on the results, the study puts forward recommendations and directions for future research.

Keywords

Academic Performance, Covid-19 Pandemic, Online Learning, Postgraduate Students, Saudi Context, Survey Questionnaire

1. Introduction

A rapid change and development in technology have led to the transformation of education systems that have integrated virtual features to facilitate teaching and learning practices. Most of the terms, such as online learning, open learning, web-based learning, computer-mediated learning, blended learning, and m-learning, share the ability to use a device connected to a network that provides students opportunities to learn anywhere at any time (Cojocariu et al., 2014). Singh and Thurman (2019) stated that technology is an essential part of online learning as the learning experiences in synchronous or asynchronous settings use different devices e.g., mobile phones, laptops, etc. with internet access.

As per the UNESCO (2020) report, the COVID-19 crisis started spreading rapidly across the world by the end of 2019. Consequently, various countries began

to execute appropriate strategies to prevent the spread of the virus. In educational institutions, the major strategy was a shift to online learning due to the closure of face-to-face classrooms. By mid-March, about 46 countries declared the closure of universities and schools due to the global crises of COVID-19 (Huang et al., 2020). All the news about the dangerous spread of COVID-19 and its effects on people's lives, made the students and their parents feel threatened in physically attending universities or schools due to an increased risk of virus transmission (Ali, 2020).

Shahzad et al. (2020) point out that the COVID-19 has changed the style of interaction, education, governance and living across the world. The major theme is social distancing which is thereby the core precautionary measure under this pandemic. With the changing themes and styles, the educational norms of universities and schools have also changed. In other words, face-to-face learning has been transformed into online or virtual learning.

Like other countries, Saudi Arabia has also been affected by the Covid-19 pandemic. One of the major areas of Saudi Arabia which have been impacted by the COVID-19 pandemic is its educational system and educational activities across the country. The Saudi Ministry of Education thereby took the initiative and transformed face-to-face learning processes into online learning. According to Aliyyah et al. (2020), these situations enforced the students and the teachers to master the media of technology in order to execute the online teaching and learning activities. It is also worth mentioning that technology in the process of learning plays a significant role in learning and teaching activities, such as social media and social networking sites (Ansari & Khan, 2020).

In recent years, several publications have appeared documenting online teaching and learning practices, mainly with the emergence of the Covid-19 pandemic. As studies in different fields of education, such as computer science, medicine, nursing, engineering and European languages, have taken up the issue of virtual teaching and learning, this study has set the following aims:

- To identify factors that impact the academic performance of MA TESOL students in online learning.
- To investigate MA TESOL students' academic performance in online learning and face-to-face learning.
- To evaluate the satisfaction level of MA TESOL students on online learning.

1.1. Statement of Problem

All educational institutes in Saudi Arabia were closed and transformed into online learning to ensure the continuity of teaching and learning during the pandemic. Therefore, all English language classes at higher educational institutes were delivered through online platforms, such as the Blackboard Ultra. Since the institutions faced several challenges in the teaching of the English language to Saudi students through online classes, most research studies have investigated this topic to understand the challenges and recommend solutions. Nevertheless,

most of these studies have been conducted on undergraduate students or school students, and there are a few studies on postgraduate students, specifically MA TESOL students. Therefore, the current study investigates the impact of the online learning system on the academic performance of the postgraduate students in TESOL during the pandemic of COVID-19.

1.2. Significance of Study

As the online system was executed with no prior planning, there might be complexities and challenges that hinder the teaching and learning processes. Hence, the Saudi government and educational institutes have developed policies for online learning at the higher education level. Various studies have been conducted regarding the attitude of the students towards online learning and determined the perceptions of teachers as well. Yet, there is limited empirical evidence to show the impact of online learning on postgraduate students' academic performance. Moreover, most studies have been conducted at the secondary level, and no such efforts have been made to study higher education cases. Hence, this study explores the factors that affect the MA TESOL students and their academic performance during online learning. The study will suggest methods to strengthen successful communication among students and teachers in online courses and contribute to the teaching and learning outcomes.

1.3. Research Questions

This study aims to answer the following three research questions:

1) What are the factors that impact the academic performance of MA TESOL students in online learning?

2) Does online learning have a positive or negative impact on MA TESOL students' academic performances?

3) To what extent are the MA TESOL students satisfied with online learning?

2. Literature Review

2.1. Online Learning in Saudi Arabia

Online learning has been part of the educational practices in Saudi Arabia for years. The utilization of computers in teaching and learning in schools in Saudi Arabia started during the 1990s. In 1996, the Ministry of Higher Education (MHE) established the Computer and Information Center (ICT) that offers services to schools and educational institutions (Al-Asmari & Khan, 2014). Since then, technology has been an important skill in the process of teaching and learning. However, even with the experience of using technology, the emergence of COVID-19 showed numerous challenges for teachers, students and other stakeholders in the Ministry of Education. Nevertheless, the government has supported the education sector by offering a free platform for students and teachers to use, which facilitates students' evaluation and communication between teachers, students and parents.

Since virtual communication is the only way to interact during Covid-19 Pandemic, this situation encouraged governments and companies to work and detect platforms and apps to ease the education mechanism. Such platforms like, Zoom, Microsoft Teams, Blackboard have been used in universities and schools. In this direction, the Saudi government has created a massive platform named "Madrasati" for government schools to utilize it in the learning process. The universities mainly use the Blackboard platform for all the educational services such as lectures, exams, and workshops, viva, etc. The Blackboarded is a user-friendly system that provides services to students and instructors. It is a system where instructors carry out the lectures and communicate with their students with no time restriction (Deanship of E-learning and Distance Education, KAU, 2019).

2.2. Online Learning in Higher Education

UNESCO suggested the use of various educational applications and other online learning programs for delivering appropriate education to the students (Bansal, 2020). As the education system has been transformed from fact-to-face learning to online learning, this transformation impacts the students and teachers. According to a study conducted by Adnan and Anwar (2020) regarding students' perception of online learning, the sudden shift that occurred in the education field has resulted in a different learning experience for students. The study revealed that online learning affected higher education students in Pakistan. Furthermore, technical issues and the lack of face-to-face interaction and socialization were the major challenges that students faced. Students found it difficult to do group-based projects and assignments (Adnan & Anwar, 2020). One of the major obstacles faced by the students in online learning in Saudi Arabia is technical obstacles (Al-Asmari & Khan, 2014).

Universities worldwide are moving more and more towards online learning or E-Learning (Ali, 2020). Competing with the global trend of performing higher education online, most universities in Saudi Arabia have fundamentally expanded their emphasis on e-learning and will supplant whole educational plans by e-learning materials into existing educational programs (AlKhalifa, 2009). For example, King Abdulaziz University (KAU) has adopted language management system (LMS) and virtual classrooms to implement additional learning to the first and second year of science courses (Al-Asmari & Khan, 2014).

2.3. Students' Academic Performance

Students' performance measures the amount of academic material that a student learns within a given timeframe. Each level of education has clear expectations or objectives that educators must teach their students. According to Mushtaq and Khan (2012), there are many factors that affect students' academic performance, and they differ from one country to another. As resulted from their study, communication is a major factor that affects students' academic perfor-

mance. In addition, family problems may decrease and affect students' performance negatively (Mushtaq & Khan, 2012). Research studies indicate that students' academic performance can be affected due to social, psychological, economic, environmental, technical, and personal factors.

In a similar way, Coman et al. (2020) illustrated that change in habits and restrictive and security measures have led to having an impact on academic performance of students in higher education. The mental health of the students is also affected as a result of the side effects that Corona virus has caused. The COVID-19 pandemic has created an exceptional situation with scenarios unknown so far and forced the population to adapt quickly. Students and adolescents are especially vulnerable in these types of crises, as the effects of the pandemic can negatively impact their physical and emotional conditions. In recent months during the pandemic, the volume of consultations related to these circumstances has increased by more than 30%, with the most frequent reasons for consultation being behavioral issues and academic performance.

To be more precise, the effects of the pandemic that can be observed directly or indirectly are all related to individuals' lifestyles and habits. In addition, there is a drop in academic performance and a shortfall in social skills due to the implementation of the online system and closure of face-to-face classrooms. The use of social networks and video games has increased exponentially, with the consequent difficulty in parental control of them. All of this may be interfering with the cognitive and psychomotor development of students and young people (Vega Fernández, 2020).

Kola et al. (2021) mentioned that the Lancet documents reveal situations of post-traumatic stress, confusion, anger and anxiety in students who have gone through prolonged confinements during previous epidemics. Routine loss, fear of spreading, reducing social contact, feeling of loneliness are some of the most common psychological effects, which can have visible consequences on learning processes and academic performance.

During online learning, students might face some psychological and sociological problems. Owing to the lockdown, psychological issues including frustration, stress, and depression are obvious (Chaturvedi et al., 2021). Bozkurt and Sharma (2020) suggest that education systems in online learning should collaborate with different stakeholders e.g., psychologists, sociologists, therapists, etc. to better address the students' problems (Bozkurt & Sharma, 2020).

Lobos Peña et al. (2021) stated that the coronavirus crisis has had a great capacity to affect mental health of students in many ways. Although schools have strived to adapt to the pandemic context in relatively little time, students need to adapt to everything that happens. Each case is unique, and it is perfectly normal to encounter cases of small ones that adapt well to the transition to online classes. However, many others will find it difficult to attend online classes, or even to prevent the anxiety and stress generated by that type of teaching from denting their emotional balance.

Iglesias-Pradas et al. (2021) mention that students are more likely to have trouble concentrating on a task, especially if it requires cognitive efforts. In some cases, distance classes can become a difficult experience for many, since being at home, students are exposed to distracting elements such as the smartphone, a nearby TV or the window. The teacher will have some added difficulties in knowing if all students are attending as he/she does not have a complete view of the context surrounding each student (Iglesias-Pradas, 2021).

Kamei and Harriott (2021) mention that the pandemic does not occur in a vacuum and this phenomenon has had a social impact that goes beyond its psychological effects on individuals. In fact, in such difficult times, cohabitation problems are more likely to intensify due to this psychological wear and tear caused by a more unpredictable and more limited environment, i.e., health restrictions, difficulties in finding work, etc., making people more vulnerable to anxiety and depressive symptoms. Naturally, students cannot experience schooling separately from what is happening at home, and this is reflected in both their ability to learn during classes and in their grades.

Literature suggests that the closure of the higher educational institutes due COVID-19 disrupted students' academic performance (Joaquin, 2020). The effects of lack of face-to-face classes on higher education are real and very tangible. In general, fewer students took the tests; the overall score on average also dropped at one point. In terms of results, the most affected were students from colleges and rural areas.

Zalech and Jaczynowski (2020) remark that the absence of face-to-face classes and interruptions in teaching show poor academic performance. Their study reveals that only 1% is achieved for every 10 days that are lost from class. Just giving one more hour of class per week throughout the school year to the main subjects increases test performance by about 6%. It is evident that this generation of students has experienced an intermittent educational stage. The simple fact that one of the students or a family member is tested positive forces isolation on him/her and the rest of the students. In addition, this is going to continue to happen several times throughout the course in each class (Zalech & Jaczynowski, 2020).

Moreover, Mbogo (2020) mentioned that under this cloak of instability, the pandemic has in turn amplified existing inequalities in education systems, such as unequal access to electronic devices (computers, tablets or mobiles) and the Internet, as well as a lack of support from families for remote learning. The fact that students with privileged backgrounds have more support from their families to learn or with extracurricular classes to support their learning further opens up educational gaps. The technological resources, non-cognitive skills, and knowledge of parents may be different: it is hard to help a student in a subject you do not understand yourself. In other words, the economic circumstances most affected by this crisis are also transmitted to the academic performance, study capacity and concentration of students (Mbogo, 2020).

In addition, Major (2020) found out that the new grown virus has had an impact on all aspects of society, and higher education is no exception. According to the U.S. Board of Education, enrollment will fall by 15 percent in the fall of 2020, and many institutions may face the need for tuition waivers if online teaching is maintained. Similarly, students face extremely uncertain circumstances. Economic conditions, health threats, and changes in online teaching methods can affect students' academic performance, educational planning, current jobs, and expectations for future work. Students from disadvantaged groups, e.g., low-income students, minority students, students with non-university parents are negatively affected by the outbreak. Although the outbreak harms all groups, its impact is more pronounced for those who had worse academic performance before the outbreak. It is expected that the GPA will directly show that the outbreak has widened the gap that already exists. In the absence of an outbreak, students from low-income families had lower expectations for GPA than students from high-income families, compared to almost twice as much as in the outbreak (Samsudin et al., 2021).

Chavarría-Bolaños et al. (2020) published a study with regard to the strictly academic field. The research states that 96% of young people had online classes during the pandemic in 2020, which they accessed through a computer (84.5%), a cell phone (63%) tablet (8.3%). However, 40% of them claimed that the connection they had was poor, transforming this aspect into an important stressor that prevented them from following their academic obligations with some peace of mind. Of that total, 42% indicated that while this modality did not favor them in their studies. It was also revealed that the physical space conditions they had to study were very bad.

Another aspect related to the academic performance of students that was evident corresponds to the problems they identified as major threats to the continuity of their studies that was the result of the health situation. In this sense, 65% mentioned emotional and 35% economic difficulties. However, 69% expressed their fear that, sooner or later, economic difficulties would prevent them from continuing to study. It is not surprising, therefore, that 81% of respondents admitted concern that they would not be able to perform well academically in this context (Chavarría-Bolaños et al., 2020).

Students in higher educational institutes face impasses during social isolation (Joaquin et al., 2020). The lack of internet connection, distracting environment, alternative work, and psychological difficulties interfere with academic performance. Since the beginning of social isolation, the activities of health professionals and psychosocial care have intensified due to the fragilities and emotional changes that people have experienced. Communication channels to support students were expanded during this period, migrating to online care.

Balderas and Caballero-Hernández (2020) stated that the face-to-face classes in public and private institutions were suspended in March 2020, and the classes began to be held remotely. After the adoption of social isolation as a measure to

prevent the new coronavirus, higher education students faced difficulties in attending online classes. The alternative for some students was the locking of enrollment that is the interruption of school activities in all subjects in which the student is enrolled. This change to remote education was one of the reasons that led many individuals to lock the enrollment. Despite the difficulties faced during remote classes, students believe that because online platforms are used, there is the possibility of recording the classes that can be reviewed at any time.

A study was conducted at a Malaysian university regarding the factors that impact TESOL postgraduate students' behavioral intention for online learning during COVID-19. A survey was distributed among 169 TESOL postgraduate students. Results show that all four factors, i.e., performance expectancy, effort expectancy, social influences, and facilitating conditions have positive effects on the students' behavioral intention to use online learning.

According to Ali (2020), educational systems have been affected by the Covid-19 pandemic. In more than 150 countries, the pandemic has produced widespread closure of educational institutions. This closure occurred due to projections made from scientific data in which it was estimated that the quarantine period would last for a maximum of 90 days. In all countries of the European Union, educational institutions were closed or closure was avoided through changes in the academic calendar of institutions. Initiatives emerged such as the Italian project "digital solidarity" in which companies offered free services to the population during the quarantine period, which includes courses and online classes. In some localities, such as the ones in the United Kingdom and Australia, schools remained open only to students of workers in sectors and to students in vulnerable situations are considered essential. In Saudi Arabia, all educational institutes switched to online teaching and learning. Lastly, in places such as China, there has been an expansion of public internet access and the provision of online courses or courses through platforms managed by educational institutions (Ali, 2020).

Online learning has a clear impact on students positively and negatively due to the sudden shift from face-to-face learning to online. A study by (Hussein et al. (2020) conducted at a university in the United Arab Emirates on undergraduate students' attitude towards online learning during COVID-19. A survey that conducted positive and negative aspects was distributed to the students. Hussein et al. (2020) found that time, cost, and safety improved participation and convenience received the highest points as positive aspects of the online learning experience. Students claimed that there is time to get ready before the lectures and no more wasting money on transportation. Also, it improved their participation without pressure or worrying about the right or wrong answers. On the other hand, distraction and reduced focus, heavy workload, problems with technology and the internet, and insufficient support from instructors and colleagues were the most recurrent negative aspects in which students claimed that they get distracted throughout the lecture, as they faced technical problems

during the classes and the work was overload at the end of term (Hussein et al. (2020). Conversely, Horspool and Lange (2012) conducted a study comparing face-to-face and online students. They found that online students did not obtain any technical issues through their learning (Horspool & Lange, 2012). Although this study was a decade before the development of the internet and the new websites that emerged in the recent years, yet students did not face any technical problems. This perhaps is because most countries shifted to online learning and the pressure on the network during classes and lectures might have caused these technical problems. Last but not least, the absence of communication, technical problems, and troubles in understanding instructional goals are the significant barriers for online learning (Song et al., 2004).

In conclusion, extensive research has shown that online learning is the new path of education even though online learning did exist before the virus. However, the use of it with the era of COVID-19 pandemic forced some countries to transform from face-to-face learning to online learning. Studies show that Saudi Arabia is one of the countries that mastered online learning during the pandemic and have designed platforms that contributed to fulfilling the entire educational journey in online learning. Studies prove that students have been affected during online learning emotionally, psychologically, socially and academically. Studies also show that technical issues are one of factors that effected students in different countries. Moreover, features of online learning need to be integrated to meet the learning needs by designing a specific curriculum, providing a suitable environment, and upgrading teachers' expertise in technology and websites for learning. It is also worth mentioning that most of the studies regarding the impact of online learning on students' academic performance focused only on undergraduate students. Therefore, this study sheds lights on the impact of online learning on the academic performance of postgraduate students in the Saudi EFL context.

3. Methodology

3.1. Research Instrument and Tool

The present study uses a structured electronic questionnaire because it is an easier and quicker tool for gathering data from the respondents. In addition, electronic questionnaires can be the best tool to be used under the current pandemic crises.

The variables in the research were measured on a five-point Likert scale ranging from strongly disagree to strongly agree. A five-point Likert scale ranging from strongly satisfied to strongly dissatisfied was also added.

3.2. Samples and Participants

The samples of the study are postgraduate students enrolled in an MA TESOL program in a Saudi Arabian university. The current study only recruited female participants due to the significant lack of number of male students in the pro-

gram, in addition to the ease of access to these female students. The target participants are first- and second-year female postgraduate students enrolled in the MA TESOL program who faced the whole transformation starting at the end of 2019. Based on the selected participants, a sample of 35 participants of female MA TESOL students were considered in this study. The number of participants is the total number of postgraduate students who are registered in the MA TESOL program. The participants were divided into year 1 (Y1) and year 2 (Y2). Y1 students started the MA TESOL program before COVID-19 the crisis, therefore after the spread of the COVID-19 throughout the country, the program shifted to online. Unlike Y2, they started the program during the COVID-19 crisis, hence, their learning was mainly online.

3.3. Data Analysis

The questionnaire data was analyzed using SPSS. The procedures and tests for analyzing the data collected by the questionnaire were consisted of six parts are: 1) Pearson correlation coefficient to examine construct validity, 2) Cronbach's Alpha coefficient to test the reliability, 3) descriptive analysis, 4) mean and standard deviation, 5) linear regression, and 6) independent samples T-test and paired samples T-Test.

4. Results and Discussions

It is found that the reliability for all sub-scales in each dimension ranged from 0.653 to 0.901, which is high and acceptable for the researchers, hence, it indicates that the questionnaire is reliable (Table 1).

Table 2 suggests that all Pearson correlation coefficients between each

Table 1. Reliability test by Cronbach's Alpha.

Dimension	Sub-Scale	No. of Items	Cronbach's Alpha
Internal factors	Technical Issues	4	0.653
	Communication	8	0.799
	Assignments and Grades	3	0.706
External factors	Study Habits	9	0.810
	Satisfaction	3	0.901

Table 2. Construct validity by method of Pearson correlation.

Sub-scale	Pearson Correlation Coefficient	p-value
Technical Issues	0.711**	<0.0001
Communication	0.910**	<0.0001
Assignments and Grades	0.626**	<0.0001
Study Habits	0.877**	<0.0001
Satisfaction	0.850**	<0.0001

**Correlation is significant at the level (<0.01).

sub-scale and the total score of the dimension ranged from 0.626 - 0.910, which are high, positive, and significant at level of significance (<0.01). This indicates acceptable construct validity for the questionnaire.

4.1. The Demographic Characteristics of the Participants

Table 3 shows the demographics of 32 participants.

4.2. Results of Research Questions

Results of research question 1. What are the factors that impact the academic performance of MA TESOL students in online learning?

To answer the first research question, the researchers used mean and standard deviation for the statements in each sub-scale in the two dimensions (internal and external) factors, and the results are as follows:

The Internal Factors:

Table 4 shows the mean and standard deviation of answers for each statement in the sub-scale (Technical Issues) as internal factor. The mean of the whole sub-scale which is 3.24 lies in the range 2.60 - <3.40—according to the Five-point Likert scale, which indicates that most of the participants are neural toward the statements of technical issues—in general.

According to the mean value of each statement, the statements have been put in a descending order from the highest mean to the lowest, so the statement

Table 3. Frequency distribution of participants according to demographic characteristics.

Variables	Categories	N	%
MA academic year	2019-2020	16	50.0%
	2020-2021	16	50.0%
Do you work	*Full time*	6	18.8%
	Part time	2	6.2%
	No	24	75.0%
Total		32	100.0%

Table 4. Means and standard deviations for the responses toward each item in the sub-scale; Technical Issues.

Statements	Mean	ST.D	Agreement level	Rank
1) The online system made the courses more interesting	3.81	1.12	Agree	1
2) I faced technical problems during lectures.	2.91	1.28	Neutral	3
3) I faced technical problems during tests.	3.44	1.41	Disagree	2
4) I faced technical issues in presentations.	2.78	1.24	Neutral	4
Total	3.24	1.26	Neutral	

(The online system made the courses more interesting) came in the first order with mean 3.81 and level of response (Agree), the statement (I faced technical problems during tests) came in the second order with mean 3.44 and level of response (Disagree), the statement (I faced technical problems during lectures) came in the third order with mean 2.91 and level of response (Neutral), and the statement (I faced technical issues in presentations) came in the fourth order with mean 2.78 and level of response (Neutral).

Table 5 shows the mean and standard deviation of answers for each statement in the sub-scale (Communication) as internal factor. The mean of the whole sub-scale which is 3.93 lies in the range 3.40 - <4.20—according to the Five-point Likert scale, which indicates that most of the participants have a positive opinion toward the statements of communication—in general.

According to the mean value of each statement, the statements have been placed in a descending order from the highest mean to the lowest, so the statement (I am able to actively communicate online via email or discussions) came in the first order with the highest mean 4.25 and level of response (Strongly agree), the statement (It was easy to contact instructors) came in the second order with mean 4.19 and level of response (Agree), the statement (Clear guidance was given in the beginning of the courses) came in the third order with mean

Table 5. Means and standard deviations for the responses toward each item in the sub-scale; Communication.

Statements	Mean	ST.D	Agreement level	Rank
1) It was easy to contact instructors.	4.19	1.03	Agree	2
2) Clear guidance was given in the beginning of the courses.	4.18	1.12	Agree	3
3) It was easy to communicate with colleagues for activities and assignments.	4.13	1.01	Agree	4
4) I am able to actively communicate online via email or discussions.	4.25	0.84	Strongly agree	1
5) Taking classes online encouraged my desire to participate more.	3.56	1.39	Agree	7
6) I believe that online classes have negatively affected communication between my instructor and me.	3.55	1.48	Disagree	8
7) Interacting with my instructor has become harder in online classes.	3.63	1.50	Disagree	6
8) Do you think your instructors are being cooperative and more understanding of the hardships we are currently facing as students?	3.94	0.95	Agree	5
Total	3.93	1.16	Agree	

4.18 and level of response (Agree), the statement (It was easy to communicate with colleagues for activities and assignments) came in the fourth order with mean 4.13 and level of response (Agree), and the statement (Do you think your instructors are being cooperative and more understanding of the hardships we are currently facing as students) came in the fifth order with mean 3.94 and level of response (Agree).

In the sixth order, the statement (Interacting with my instructor has become harder in online classes) came with mean 3.63 and level of response (Disagree), the statement (Taking classes online encouraged my desire to participate more) came in the seventh order with mean 3.56 and level of response (Agree), and the statement (I believe that online classes have negatively affected communication between my instructor and me) came in the eighth order with mean 3.55 and level of response (Disagree).

Table 6 shows the mean and standard deviation of answers for each statement in the sub-scale (Assignments and Grades) as an internal factor. The mean of the whole sub-scale which is 3.32 lies in the range of 2.6 - <3.40—according to the Five-point Likert scale, which indicates that most of the participants are neutral toward the statements of "Assignments and Grades"—in general.

According to the mean value of each statement, the statements have been given a descending order from the highest mean to the lowest, so the statement (The assignments and exams were fairly instructed at the beginning of each term) came in the first order with mean 3.69 and level of response (Agree), the statement (Grade distribution across assignments was not fair) came in the second order with mean 3.47 and level of response (Disagree), and the statement (The number of assignments affected my grades) came in the third order with mean 2.81 and level of response (Neutral).

From Tables 4-6, it can be concluded that the internal factors came in the following order. The factor (communication) came in the first order with the highest mean of 3.93 and level of response (agree), then the factor (Assignments and Grades) came in the second order with mean of 3.32 and level of response (neutral), then the factor (Technical Issues) came in the third order with mean of 3.24 and level of response (neutral).

Table 6. Means and standard deviations for the responses toward each item in the sub-scale; Assignments and Grades.

Statements	Mean	ST.D	Agreement level	Rank
1) The number of assignments affected my grades.	2.81	1.40	Neutral	3
2) Grade distribution across assignments was not fair.	3.47	1.34	Disagree	2
3) The assignments and exams were fairly instructed at the beginning of each term.	3.69	1.28	Agree	1
Total	3.32	1.34	Neutral	

External Factors:

Table 7 shows the mean and standard deviation of answers for each statement in the sub-scale (Study Habits) as an external factor. The mean of the whole sub-scale which is 3.48 lies in the range of 3.40 - <4.20—according to the Five-points Likert scale, which indicates that most of the participants have a positive opinion toward the statements of "Study Habits"—in general.

According to the mean value of each statement, the statements have been put in a descending order from the highest mean to the lowest, so the statement (I am self-disciplined to get things done on time) came in the first order with mean 4.16 and level of response (Agree), the statement (I work my best on the day of the deadline) came in the second order with mean 3.94 and level of response (Agree), then the statement (I am able to set goals and deadlines for myself) came in the third order with mean 3.88 and level of response (Agree), the statement (I only work for high marks instead of understanding the material) came in the fourth order with mean 3.72 and level of response (Disagree), and the statement (I prefer listening to the lecture than attending because of the scheduled lecture time) came in the fifth order with mean 3.56 and level of response (Disagree).

The statement (I have become lazier and not in the mood to study) came in the sixth order with mean 3.16 and level of response (Neutral), the statement (I study only when there is a quiz) came in the seventh order with mean 3.09 and level of response (Neutral), the statement (I lost interest when attending a

Table 7. Means and standard deviations for the responses toward each item in the sub-scale; Study Habits.

Statements	Mean	ST.D	Agreement level	Rank
1) I am able to set goals and deadlines for myself.	3.88	1.13	Agree	3
2) I lost interest when attending a three-hour lecture online.	2.94	1.34	Neutral	8
3) I feel tired, bored and sleepy in the online lecture.	2.84	1.35	Neutral	9
4) I am self-disciplined to get things done on time.	4.16	0.92	Agree	1
5) I work my best on the day of the deadline.	3.94	1.32	Agree	2
6) I study only when there is a quiz.	3.09	1.42	Neutral	7
7) I prefer listening to the lecture than attending because of the scheduled lecture time.	3.56	1.43	Disagree	5
8) I have become lazier and not in the mood to study.	3.16	1.42	Neutral	6
9) I only work for high marks instead of understanding the material.	3.72	1.42	Disagree	4
Total	3.48	1.31	Agree	

three-hour lecture online) came in the eighth order with mean 2.94 and level of response (Neutral), and statement (I feel tired, bored and sleepy in the online lecture) came in the ninth order with mean 2.84 and level of response (Neutral).

Table 8 shows the mean and standard deviation of answers for each statement in the sub-scale (Satisfaction) as an external factor. The mean of the whole sub-scale which is 3.52 lies in the range of 3.40 - <4.20—according to the Five-point Likert scale, which indicates that most of the participants have a positive opinion toward the statements of (Satisfaction)—in general.

According to the mean value of each statement, the statements have been given a descending order from the highest mean to the lowest, so the statement (How satisfied are you with taking your courses online) came in the first order with mean 3.81 and level of response (Agree), the statement (Do you think your academic performance has improved) came in the second order with mean 3.44 and level of response (Agree), and the statement (Do you prefer online learning over conventional teaching methods) came in the third order with mean 3.31 and level of response (Neutral).

From Table 7 and Table 8, it can be concluded that the external factors came in the following order. The factor (satisfaction) came in the first order with the highest mean 3.52 and level of response (agree), and the factor (study habits) came in the second order with mean 3.48 and level of response (agree).

Results of research question 2. Does online learning have a positive (or negative) impact on MA TESOL students?

Simple linear regression models were used to study the impact of internal and external factors on MA TESOL students, and the results are shown in the following Table 9 and Table 10:

To study the effect of internal factors (independent variables) on the academic performance of MA TESOL students (dependent variable), the researchers used simple linear regression to test the effect of each independent variable; teaching issues, communication and assignments and grades separately on the dependent variable, academic achievement.

It is found that all correlation coefficients (R) are small values, and all regression

Table 8. Means and standard deviations for the responses toward each item in the sub-scale; Satisfaction.

Statements	Mean	ST.D	Agreement level	Rank
1) How satisfied are you with taking your courses online	3.81	1.31	Agree	1
2) Do you prefer online learning over conventional teaching methods	3.31	1.55	Neutral	3
3) Do you think your academic performance has improved	3.44	1.34	Agree	2
Total	3.52	1.40	Agree	

Table 9. Results of simple linear regression for the effect of internal factors on MA TESOL Post graduate students.

Model	Correlation Coefficient R	Coefficient of Determination R^2	Regression Coefficient (β)	F-test	p-value
The effect of (Technical Issues)	0.224	0.050	0.051	0.740	0.404
The effect of (Communication)	0.024	0.001	0.005	0.008	0.930
The effect of (Assignments and Grades)	0.266	0.071	0.053	1.068	0.319

Table 10. Results of simple linear regression for the effect of external factors on MA TESOL students.

Model	Correlation Coefficient R	Coefficient of Determination R^2	Regression Coefficient (β)	F-test	p-value
The effect of (Study Habits)	0.059	0.003	−0.021	0.049	0.892
The effect of (Satisfaction)	0.264	0.070	0.034	1.048	0.323

models are not statistically significant since all p-values correspond each model are greater than 0.05. Hence, the internal factors of online learning have no significant impact on MA TESOL students.

To study the effect of external factors (independent variables) on the academic performance of MA TESOL students (dependent variable), the researchers used simple linear regression to test the effect of each independent variable; study habits and satisfaction separately on the dependent variable, academic achievement.

It is found that all correlation coefficients (R) are small values, and all regression models are not statistically significant since all p-values correspond each model are greater than 0.05. Hence, the external factors of online learning have no significant impact on MA TESOL students.

Results of research question 3: Is there is a significant difference between online learning and face-to-face learning in their impact on MA TESOL students?

To answer this question, the researchers used independent samples t-test and paired samples t-test to study the difference between students of online learning and students of face-to-face learning in their impact on MA TESOL students, and the results are as follows.

Table 11 shows the results of the independent samples t-test to study the differences between the students who studied online (2019-2020) and those who

studied online (2020-2021) in their second term. The results show that there is no statistically significant difference between the students of academic year 2019-2020 and students of academic year 2020-2021 who studied online in the second term since test statistic (t) is −1.76 with p-value 0.088, which is greater than 0.05.

Table 12 shows the results of paired samples t-test to study the differences between the students in the academic year (2019-2020) who studied face-to-face in the first term and studied online in the second term. It is found that the mean GPA of face-to-face is 4.59 and for online is 4.65. The results show that there is a statistically significant difference between face-to-face and online learning impact on MA TESOL students' academic performance since the statistic (t) is −2.68 with p-value 0.017, which is less than 0.05. This means that the online learning has a positive impact on MA TESOL students' academic performance.

Table 13 shows the results of paired samples t-test to study the differences between the students in the academic year (2020-2021) who studied online only in the first and second terms. The results showed that there is no statistically significant difference between MA TESOL students' academic performance in the first and second terms both online since statistic (t) is −1.16 with p-value 0.264, which is greater than 0.05.

Table 14 shows the results of independents samples t-tests to study the differences between the students in the academic years 2019-2020 and 2020-2021 of their opinions toward the impact of online learning factors on the academic performance of MA TESOL students. The results show that there are no statistically significant differences between the students in the academic years 2019-2020

Table 11. Results of independent samples t-test for the students in the academic years (2019-2020) and (2020-2021) who studied online in the second term.

Academic year	N	Mean	STD	Test statistic (t)	p-value
2019-2020	16	4.65	0.37	−1.76	0.088
2020-2021	16	4.83	0.18		

Table 12. Results of paired samples t-test for the students in the academic year (2019-2020) who studied face-to-face and online in their first and second terms.

Term	Mean	STD	Test statistic (t)	p-value
1st term (Face-to-face)	4.59	0.42	−2.68	0.017
2nd term (Online)	4.65	0.37		

Table 13. Results of paired samples t-test for the students in the academic year (2020-2021) who studied online only in their first and second terms.

Term	Mean	STD	Test statistic (t)	p-value
1st term (Online)	4.48	1.22	−1.16	0.264
2nd term (Online)	4.83	0.18		

Table 14. Results of independent samples t-test for the opinion toward the impact of online learning factors on the academic performance of MA TESOL students according to academic year.

Factors	Academic year	Mean	STD	Test statistic (t)	p-value
Technical Issues	2019-2020	3.09	0.75	−1.05	0.30
	2020-2021	3.38	0.77		
Communication	2019-2020	3.78	0.71	−1.15	0.26
	2020-2021	4.09	0.81		
Assignments and Grades	2019-2020	3.02	1.18	−1.65	0.11
	2020-2021	3.62	0.88		
Study Habits	2019-2020	3.22	0.46	0.29	0.78
	2020-2021	3.17	0.49		
Satisfaction	2019-2020	3.40	1.25	−0.54	0.59
	2020-2021	3.65	1.35		

and 2020-2021 in their opinion toward the impact of online learning factors on the academic performance of MA TESOL students since all p-values are greater than 0.05. There is no discussion of the findings. The findings need to be discussed in relation to the previously published research on the topic.

5. Discussion

The participants in this study were forced to shift from face-to-face learning to online learning due to the spread of COVID-19 pandemic. Even though this sudden shift has been a challenge to many educational institutes around the world, online learning has shown to be just as effective as face-to-face learning. Comparing the results of academic performance for MA TESOL students in a face-to-face setting vs an online setting, the study found a statistically significant result (p = 0.017) where students' GPAs were higher (face-to-face GPA = 4.59 out of 5, online GPA = 4.65 out of 5) when learning has taken place online vs face-to-face. The results also indicate that postgraduate students did succeed in their online learning journey. Therefore, there is no significant difference between the results on whether online learning and face-to-face learning are different.

When analyzing factors that impact academic performance in an online setting, the analysis of results in this study shows that there is no significant impact of internal factors (technical issues, communication, and assignments and grades) on MA TESOL students' academic performance in online learning. Analyzing the sub-scales for each of the internal factors in terms of technical issues (see, Table 4), the participants in the study found that the online learning system made courses more interesting. In terms of communication (Table 5), participants found that in an online learning setting, it was easy to communicate

with the instructor, they were able to actively communicate via email and/or online discussions and it was easier for them to communicate with colleagues for assignments and activities. Finally, under the sub-scale assignments and grades (**Table 6**), participants found that assignments and exams were fairly structured at the beginning of each term.

Turning to the sub-scales of the external factors (study habits and satisfaction) and its impact on academic performance in online learning, the results were also found not to be statistically significant on MA TESOL students' academic performance. However, under the sub-scale study habits (**Table 7**), the participants found that they are self-disciplined to get things done on time and are able to set goals and deadlines. In terms of satisfaction (**Table 8**), participants were highly satisfied with taking courses online and believe that their academic performance has improved. Even though the impact of internal and external factors were not found to be statistically significant on MA TESOL students' academic performance in an online setting, participants have self-reflected that their performance has improved in an online setting. Participants have also shown a higher preference to online learning than traditional face-to-face instruction.

The results in this study indicate that academic performance is not affected by the type of learning (online vs face-to-face). Online learning has added advantages than face-to-face learning such as, the flexibility and ease of the learning process in terms of transportation. Students no longer have to worry about actually being on campus to attend a lecture or miss a lecture due to work related issues. In addition, parents can stay with their children at home and still manage to attend classes online. Since online learning takes place on specific platforms such as Blackboard, educational institutions can save money and resources (classroom and building maintenance costs, electricity costs, janitorial costs, and much more) when shifting to online classes. According to AlQhtani et al. (2021), online learning has its weakness and strengths, students found its effectiveness in submitting assignments, meetings, and individual needs. However, online learning was less effective in building knowledge and interaction level. As a result, the study by AlQhtani et al. (2021) suggested that there are courses that can be given online and courses that can be given face-to-face. Based on the results of this study on others (Garnham & Kaleta, 2022; Mali & Lim, 2021; Nasution et al., 2021), blended learning (a mixture of online and face-to-face instruction) is the optimal choice for the future of education. The MA TESOL program can benefit from adopting a blended learning program where the program can divide the coursework into the courses that can be given to students online, the most theoretical courses and the practical courses that involve applying the theories that is taught in the course in practical situations can be given face-to-face. In this matter, students will have more time in submitting assignments or any issues that could arise.

In conclusion, blended learning is the most efficient learning method for postgraduate students as they are aware of the use of technology and are com-

mitted to attending their lectures. This study showed students achievement in their leaning outcomes and they were satisfied with online learning. It is recommended that higher institutions when designing a blended course to focus on student's needs. Institutions must not only consider the elements of effective adult learning and find the right blend of online and in-class activities when designing a blended course, but they must also address some of the student issues that arise when using the approach, such as a lack of technology and the time management skills required for success in a blended format (Garnham & Kaleta, 2002).

6. Conclusion

Online learning will be a way of learning that will be used with or without a pandemic. Various studies showed positive effects of online learning on students and some showed that it has a negative impact. This all depends on the age of the students and the factors that highly impacted them. Therefore, it is essential to conduct studies that reveal the effects of online learning on students to enhance the learning process. Many studies conducted on the effects of COVID-19 on graduate students; however, no studies have been conducted on the effects of COVID-19 on MA TESOL students. This study shows that online learning does have a positive effect on MA TESOL female students Y2. MA TESOL program marked its success in achieving learning outcomes that are fully prepared and well managed. According to the students' perceptions, online learning gave them extra time to work. Students suggested that dividing the lecture time will let them feel less bored and more engaged in class. Overall, online learning was a new experience for the MA students.

Hybrid learning can be applied in this program by selecting courses that can be taught online and courses that can be given on campus. Institutions should reactivate the MA program not only face-to-face but also online. Therefore, blended learning is a suitable way of learning since postgraduate students are familiar with the use of computers. Moreover, implementing blended learning in the MA program will save money, resources, and time.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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