

Satisfaction of Preparatory Year Students at Umm Al-Qura University with Distance Learning During Covid-19

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Summary

During the past two years, the education systems in the world witnessed unprecedented turmoil due to the coronavirus (Covid-19) pandemic, as most schools and universities in the world closed their doors to more than 1.5 billion students, or more than 90% of the total learners, according to recent figures issued by the UNESCO Institute for Statistics. Education experts have agreed that post- coronavirus education will not be the same as before, especially with the increasing use of modern technology in education. One of the most important new patterns with a structure digital in education is distance education, this style has been used, in many countries of the world, as an alternative to traditional education, since the beginning of the pandemic. In Saudi Arabia, this type of education has been used in all educational institutions, starting from kindergarten until the postgraduate level, as an alternative to face-to-face education to preserve the health and safety of students and workers in educational institutions. This study aimed to explore the level of satisfaction of preparatory year students on distance learning in their first year of study at Umm Al-Qura University. The findings of this study showed that students in the preparatory year were satisfied with their online learning experience. In addition, the results revealed that there was no effect for gender and location of study on students' level of satisfaction. Saudi universities should continue to work to create a suitable learning environment for students at the e-learning level.

Key-words: Covid-19 Educational Crisis, Online Learning, Distance Learning, Students' Satisfaction.

1. Introduction

The year 2020 was different in everything, as life was not as normal as it was. Many things have been changed so much because of the Coronavirus (Covid-19) pandemic. This pandemic has affected people around the world regardless of their religion, gender, nationality, and level of income. Many aspects of their life have been changed since the pandemic hit. Education was one of these aspects which have been affected hard by the Covid-19 pandemic. Thousands of schools and universities have closed their doors worldwide. Millions of students were unable to get their regular education. Although the closure of schools was the safest solution in combating the crisis and reducing its effects, this closure led to huge losses in the students'

missing classes, peers, and the school atmosphere, in addition to economic damage. The high number of coronavirus infections led to the transmission of many educational institutions in many countries around the world - including colleges and schools in some poor countries, to online learning. According to the report published by UNESCO (2020), this closure of educational institutions around the world due to the Coronavirus (Covid-19) is considered the largest ever in history.

The situation in Saudi Arabia was not far from all these changes that have occurred in the world because of the spread of Covid-19. The Kingdom's leadership has demonstrated its ability to manage the emerging coronavirus (Covid-19) crisis through a package of precautionary decisions to prevent its causes and limit its spread, to preserve the safety of citizens and residents. These efforts were able to result in investing the great capabilities provided by the state in each sector and contributing within a single working team led by the Ministry of Health to contain the crisis and draw possible scenarios for its risks. In March 2020 and based on the concern to protect the health of students, educational and administrative staff in public and university education and to ensure their safety, among the decisions taken by the state was to suspend study in all educational institutions until further notice. In mid-April of the same year, the Ministry of Education decided to resume the school year remotely for all students in various educational stages, with the approval of the results of the previous semester for students in general education. Students in Saudi universities completed the remaining of their academic year 2020 online through the various learning methods provided by universities such as Blackboard, Microsoft Teams, and Zoom.

In the past academic year and with the rapid spread of the virus, the Ministry decided to adopt distance education at the beginning of the school year for seven weeks, and then study the conditions related to health and safety with the increasing spread of the virus. At the end of the fifth week of the school year, a royal decree was issued to continue distance learning in all educational institutions until the end of the school year. The situation was difficult

for some students at all levels and stages, as this experience was new to them. In addition, some problems made it difficult for students to experience distance learning, including weak communication networks in some areas, and the inability of some families to provide the necessary devices for distance learning, such as mobile phones, laptops, and tablets, for their children due to financial conditions, despite the generous state contribution to that. By the end of the previous year, Saudi students have completed nearly a year and a half of distance learning in an experience that was special for many of them. Preparatory year students in Saudi universities had a slightly different experience, as they were in their first year in their university journey which is completely different from the high school level in many aspects.

2. Literature Review

2.1. The History of the E-Learning in Saudi Arabia

The rapid development that has occurred in technology and the Internet in recent years has provided great services to humanity in various fields, and these services have contributed to changing people's lives for the better. The field of education is considered one of the most important areas that have been affected by this remarkable development in technology, as the emergence of technology in education has helped to change teaching methods and tools. The term e-learning or online education has emerged with the growing use of the internet in the field of education. E-learning considers a modern revolution in the methods and techniques of education, which harness the latest in modern technology in terms of devices and programs in the educational process, starting from the use of electronic tools of presentation to deliver lessons in traditional classrooms, and ending with the creation of virtual classrooms and various interactive environments, most of which have proven their effectiveness in education. The American Society for Training and Development (ASTD) defined e-learning as " anything delivered, enabled, or mediated by electronic technology for the explicit purpose of learning" (as cited by Fee, 2009).

In recent years, education in Saudi Arabia has undergone many major and radical developments that have brought about a significant change in it in all aspects. However, despite this development and change, e-learning did not find much interest on the part of those responsible for the educational process in Saudi Arabia. At the beginning of the first decade of the 21st century, there were some shy attempts to apply distance education in Saudi Arabia. These attempts were made by the General Presidency to educate girls at the time at the university

level (Aljabre, 2012). These attempts were due to the increase in the number of female students in Saudi higher education institutions, and despite the seriousness of these attempts, they failed because there were many obstacles related to e-learning itself at that time and other factors (Alturki, 2014). After this uncontinued attempt by the General Presidency for Girls' Education, some higher education institutions started trying to apply e-learning alongside traditional education. These attempts have allowed many Saudi students who are unable to engage in face-to-face classes due to some obstacles such as their jobs or age, to receive their education again through e-learning.

Years later and with technical and technological progress in Saudi universities, some formal steps have appeared from Saudi universities. The first of these universities was King Fahd University of Petroleum and Minerals (KFUPM), where it established an e-learning center to organize e-learning in 2003 (Al-Asmari & Khan, 2014). Other Saudi universities then began to benefit from the experience of the University of Petroleum and Minerals in e-learning, universities such as King Saud University (KSU), King Abdulaziz University (KAU), and other universities opened admission to some e-learning programs. Following this step by these universities, the concept of e-learning began to expand in the higher education scope in Saudi Arabia. This expansion and spread led to the establishment of a specialized e-learning center by the Ministry of Higher Education at the time in 2006, which was called the National Center for E-Learning and Distance Education (Aljaber, 2018). The mission of this center was to follow up the e-learning process in higher education institutions. The process of e-learning seemed to flourish in Saudi Arabia after 2010, as in the year 2011, the first Saudi electronic university was established in the capital, Riyadh, and was named the Saudi Electronic University. The goal of this university is to provide an academic environment based on information and communication technologies, e-learning and blended education. The university grants undergraduate and graduate degrees, in addition to offering continuous learning courses in several fields. Thereafter, e-learning spread in almost all higher education institutions in Saudi Arabia, and deanships for e-learning were established in most universities. As a result of this development, the National E-Learning Center was established in Riyadh in 2017 with the aim of controlling the quality of e-learning in various Saudi educational institutions. These days, many electronic means are used to deliver education in Saudi Arabia, including social media (Alhaythami,2020).

2.2. Students' Satisfaction with E-Learning in Saudi Arabia

Regarding students' satisfaction with e-learning in Saudi educational institutions, some researchers were interested in studying this topic to try to understand the students' point of view on the e-learning process (Abdel-Jaber,2017; Al-Fahad, 2010, Almusharraf & Khahro,2020; Al-Qudah, 2021; Alqurashi,2019; Alzahrani,2017). These researchers and others have studied the satisfaction of students in some higher education institutions in Saudi Arabia with the e-learning process and also tried to find out some of the obstacles and problems related to this process. All of these studies, except the study of Almusharraf and Khahro (2020), were conducted before the emergence of the Coronavirus (Covid-19) pandemic, where a few students were receiving part of their classes electronically. The results of most of these studies showed the satisfaction of Saudi university students with the e-learning process in general, with their hope to expand e-learning delivery further in the near future.

3. The Purpose of Study

The fast spread of the Covid-19 pandemic has forced the educational systems around the world into a sudden transition towards distance education. In Saudi Arabia, online learning is considered a recent experience in the education system for both students and teachers. However, the Ministry of Education has tried to facilitate the process by creating e-learning platforms to deliver educational services for learners in their places of residence to help them continue their educational journey without stopping. On the side of higher education, universities have completely switched to distance learning to maintain the safety of their students and employees. UQU University was one of these universities, where e-learning platforms replaced in-person education such as Blackboard, Webex and Microsoft team with great focus on the Blackboard platform. Students in various colleges and majors have used these tools, including preparatory year students who are in the first year of their university journey. The main objective of this study was to find out the level of satisfaction of this group of students on distance learning in their first year of study at Umm Al-Qura University. In this study, the researcher also tried to find out whether there was a difference between the level of satisfaction of these students with their experience in distance education depending on their gender and location of study (main campus and branches).

4. Significance of the Study

Educational authorities in the Kingdom of Saudi Arabia sought to modernize their educational systems with the onset of the Covid-19 pandemic to prevent the spread of this pandemic from within educational institutions and also to preserve the health and safety of employees. First-year undergraduate students were eager for this new stage in their lives, as it was completely different from their previous educational stages. Many studies focused on the level of satisfaction of students at the undergraduate level about many services, including distance education (Alghamdi,2015; Kamel,2015), but few of these studies focused on measuring student satisfaction in the first year in Saudi Arabia, especially about their experience of distance education. The academic years 2019-2020 were difficult and severe for the preparatory year students in Saudi Arabia due to the novelty of the war and the epidemic, so the researcher was interested in measuring the level of students' satisfaction this year about their experience in distance education at Umm Al-Qura University.

5. Study Question and Hypothesis

The study aimed to answer this main question:

Research Question (RQ): What is the level of satisfaction of preparatory year students at UQU with their distance learning?

This study also examined the following hypotheses, that associated with the main study question:

H₀₁: There is no significant difference in the level of satisfaction of preparatory year students toward their distance learning experience at UQU based on their gender.

H₀₂: There is no significant difference in the level of satisfaction of preparatory year students toward their distance learning experience at UQU based on their location of study (Main campus vs branches).

6. Method

6.1. Participant and Procedure

A link of the Arabic version of the instrument on the Qualtrics platform was sent to preparatory year students online with the cooperation of the preparatory year coordinator during the second semester of the 2021 academic year. The online survey was sent to all students in the preparatory year in all locations (Makkah, Jamom, Al-lith, and Al-Qunfudah) two times. Umm Al-Qura University offered three different tracks for students in the preparatory year and these tracks are the health track, administrative track, and scientific track. A total of 111

students completed the survey. The participants were from all UQU locations and from different tracks in the preparatory year program.

6.2. Measure

Aman's Satisfaction Instrument (Aman, 2009) was used to answer the question of this study. In 2009, Aman developed this scale to measure students' satisfaction with their online courses. This scale focused on five different factors that related to the satisfaction of students in their online courses. These factors were: learning outcomes, assessment, and emulation, learning resources & materials, learner interactions, and course technology. Each factor of these had three or more questions. In addition to these items included five factors, the scale contains five other items. Four of these items measure some basic information about distance learning, such as student support and technical support provided by the university (i.e., Items 1, 2, and 3), while the fifth item (i.e., Item 26) measures the satisfaction of preparatory year students with distance education in general. The response for all questions in these factors included a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), with a neutral midpoint. This instrument has been validated as a tool to measure students' satisfaction with their online courses in many studies (Aman,2009; Simpson, 2012; Basith et al., 2020)

In this study, Aman's Satisfaction Instrument was translated into Arabic to administer to the target population of this study, which is preparatory year students at UQU. The original version of Aman's scale was in English, so the translation of this scale was needed to use it with people of a different language (i.e., preparatory year students at UQU in SA). Three faculty members in the field of translation used several validity criteria (e.g., back translation, use of standard language, formatting of the items, clarity of the instructions, relevance of the items, clarity in wording) which were developed by Fowler (2013) to enhance the validity of the Arabic version of Aman's scale. Furthermore, the face validity of the scale was checked by five faculty members who hold a doctoral degree in different majors in education and two of them were in the field of measurement and evaluation. Based on the feedback and comments of these reviewers, the final version of this scale was sent to the students. The Arabic version of Aman's scale consisted of two parts, in the first part students were asked to provide some demographic information about them (e.g., gender, age, GPA, study branch and study track). The second part included the Arabic version of Aman's satisfaction scale. Some changes were made in the Arabic version of the measure, such as

changing the construction of some vocabulary for some items to make them more suitable for the purpose of the study.

7. Results

7.1 Sample Descriptive Statistics

The data of all participants, 30 items and demographic questions were analyzed using SPSS software to answer the study's main question and test its hypotheses. In this study, 478 preparatory year students started the scale, and they were from different branches of UQU. However, only 111 students finished the scale completely, 64 (57.5%) of whom were male students, while 47 were female students (42.3%). Most of the students ($n = 56$; 50.5%) were studying at Al-Qunfudah branch and the main campus ($n = 42$; 37.8%). Many students ($n = 64$; 57.7%) were in scientific track in the preparatory year and had a mean GPA of 3.25 ($SD = .69$). The demographic characteristics of the study sample are presented in Table 1.

Table 1. Demographic Characteristics of the Study Sample (N=111)

Variable	<i>n</i>	%
Gender		
Male	64	57.7
Female	47	42.3
Campus		
Al-Qunfudah	56	50.5
Main Campus (Makkah)	42	37.8
Al-Lith	9	8.1
Al-Jumum	4	3.6
Study Track		
Scientific Track	64	57.7
Health Track	42	37.8
Administrative Track	5	4.5

7.2 Reliability & Validity of the Scale

Reliability of the Scale. Before running any data analysis in the study, the reliability and the validity of the study measure were tested in its Arabic version as they are considered essential properties for any scale (Crocker & Algina, 2008). In the Arabic version of Aman's Satisfaction Instrument, the reliability was examined through two parts: 1) the reliability of all items in the scale and 2) the reliability of the five factors. In this study, the Internal Consistency Coefficients were calculated for all the items in scale first, then for each factor in Aman's Satisfaction Instrument by using Coefficient Alpha (Cronbach, 1951). Many researchers have indicated that achieving a reliability level of .6 or higher is considered acceptable especially for a multidimensional scale containing (Clark & Watson, 1995; Cortina, 1993; Taber, 2018) .

The reliability analysis results of the whole scale showed that the Arabic version of Aman’s Satisfaction Instrument had a value of .92 which considers an excellent level of reliability (George & Mallery, 2019; Griethuijsen et al., 2015). The second analysis of reliability was conducted on the five factors, and the reliability values for these five factors ranged from .66 to .81, which indicated an acceptable level of reliability (Nunnally 1978). Taking these values together, the Arabic version of Aman’s Satisfaction Instrument had strong reliability evidence. The values of reliability in both analyses are reported in Table 2.

Table 2. Reliability of the Arabic version of Aman’s Satisfaction Instrument

Factor	Number of Items	Cronbach’s (Coefficient) α
Learning Outcomes	4	.72
Assessment, and Evaluation	5	.81
Learning Resources & Materials	5	.79
Learner Interactions	4	.72
Course Technology	4	.66
Overall Scale	26	.92

Validity of the Scale. To make sure about the validity of the Arabic version of Aman’s Satisfaction Instrument, the internal consistency was used as it helps in providing some evidence about the validity. The internal consistency was calculating based on the correlation coefficients (Spearman’s correlation) between each item and the total score of the scale. Table 3 shows that all items in the scale had a good correlation with the total score and all these correlations were significant ($p < .01$). These results indicate that there was good evidence about the validity of the scale as well as the reliability of its results. (The focus of this study was on items from 4 to 26).

Table 3. Spearman’s Correlation Coefficients between the Score of Each Item and the Total Score

Item No.	r	Item No.	r	Item No.	r
1	**0.679	10	**0.656	19	**0.519
2	**0.664	11	**0.635	20	**0.527
3	**0.622	12	**0.662	21	**0.473
4	**0.614	13	**0.645	22	**0.495
5	**0.618	14	**0.610	23	**0.475
6	**0.569	15	**0.642	24	**0.493
7	**0.587	16	**0.513	25	**0.474
8	**0.547	17	**0.623	26	**0.430
9	**0.643	18	**0.512		

r = Correlation Coefficient
 ** $P < .01$

7.3 Research Question (RQ)

The main purpose of this study was to answer this question: what is the level of preparatory year students’ satisfaction with their distance learning at UQU? To answer this question, mean and standard deviation were calculated for each of the five factors in the Arabic version of Aman’s Satisfaction Instrument. A high mean value indicates satisfaction among students towards this factor in distance education. In addition, the arithmetic mean, and standard deviation were calculated for Item 26 (i.e., In general, I am satisfied with distance education), as this item was focused on measuring the level of general satisfaction of the preparatory year students about their experience in distance education. The mean and standard deviation for all five factors and Item 26 are listed in Table 3.

Table 3. Mean and Standard Deviation for all Five Factors and Item 26.

Factor	M	SD	Level of Satisfaction
Learning Outcomes	3.01	.37	Average
Assessment, and Evaluation	3.63	.77	High
Learning Resources & Materials	3.60	.72	High
Learner Interactions	3.61	.72	High
Technology	3.60	.68	High
Item 26. In general, I am satisfied with distance education	3.66	1.20	High

To rank the level of satisfaction the following criteria was used:

- From 1 to 1.80 represents (Very Low).
- From 1.81 until 2.60 represents (Low).
- From 2.61 until 3.40 represents (Average).
- From 3:41 until 4:20 represents (High).
- From 4:21 until 5:00 represents (Very High).

As it can be seen from the table above, the mean for these five factors ranged from 3.01 to 3.63 (see Table 3), which indicated that students of the preparatory year program at Umm Al-Qura University showed average satisfaction with their distance education experience during the Covid-19 pandemic in all five aspects of this experience, in addition to that, they indicated above average satisfaction with the distance education experience in general ($M = 3.66, SD = 1.20$). In more detail, the results of the analyses of student satisfaction with the five factors in the Arabic version of Aman’s Satisfaction Instrument revealed that students showed good satisfaction with the assessment and evaluation factor during their e-learning ($M = 3.63, SD = .77$). All five items in this factor had a high mean value, which is considered a good sign of satisfaction about different methods of assessment that their instructors provided them during their classes. In this factor, Item 8

(i.e., “ I find it important to be provided with the course assessment methods at the beginning of a course”) had the highest mean ($M=3.76, SD=1.02$) among the five items in the evaluation and assessment factor, while item 12 (i.e., “ The course assessment methods for this online course were closely related to the course objectives”) had the lowest mean ($M=3.55, SD=1.02$). The mean and standard deviation for each item in the assessment and evaluation factor are presented in Table 4.

Table 4. Mean and Standard Deviation for all Items in the Assessment and Evaluation Factor

No	Statement	M	SD
4	I feel it is important for me as a student to be provided with assessment methods	3.76	1.02
5	The assessment methods for each online course were clarified at the beginning of the course learning	3.61	1.01
6	The assessment methods for each online course are clearly described during e-learning	3.61	1.04
7	The assessment methods for each online course included a variety of different assessment methods	3.61	1.02
8	The methods of assessment for each online course were closely related to the learning objectives of this course	3.55	1.02

The students' satisfaction with other factors in their online learning was not far from their satisfaction with the assessment and evaluation factor, as their satisfaction with these factors was very close to their satisfaction with the evaluation process. The results showed average student satisfaction with learners' interaction with each other or with their instructors ($M=3.61, SD=.72$; see Table 3). In the aspect of learning resources and materials, students indicated their satisfaction with the materials and resources used by their instructors during their learning process. This satisfaction was at the same level as the satisfaction with the technology used in their e-learning ($M=3.60, SD=.72$; $M=3.60, SD=.68$, respectively; see Table 3). These outcomes indicated that the students of the preparatory year at Umm Al-Qura University obtained good educational resources that help them in their e-learning as well as various technological ways that helped them receiving good e-education.

Table 5. Mean and Standard Deviation for all Items in the Three Factors

Factor of Learner Interactions			
No	Statement	M	SD
18	I feel that it is important to interact with the instructor during the online courses	3.69	.92
19	The course instructors for my online courses interacted with me in a timely fashion	3.62	1.07
20	The course interaction with the instructors for my online courses helped me reach the courses' objectives	3.48	.97
21	The amount of course interaction with other students for my online courses was helpful in reaching the courses' objectives	3.66	.94
Factor of Learning Resources & Materials			
13	I find it important to be provided with the course resources and materials in the online learning	3.66	.99
14	The course resources and materials for my online courses were easily accessible during the online learning	3.55	1.03
15	The purpose of course resources and materials for my online courses were clearly described.	3.43	.91
16	The course resources and materials for my online courses helped me reach the courses' objectives.	3.75	.94
17	The course resources and materials for my online courses included a wide variety of resources and materials	3.62	.98
Factor of Technology			
22	I find it important to be provided with course technology that enhances learning during the online learning	3.69	.92
23	The course technology for my online courses was readily available during the online learning	3.62	1.07
24	The course technology for my online courses functioned very well	3.48	.97
25	The course technology for my online courses was helpful in reaching the courses' objectives	3.66	.94

Among the five factors included in the scale, the preparatory year students' satisfaction with their e-learning outcomes ranked last ($M=3.01, SD=.37$; see Table 3), where this value indicated that students were neither satisfied nor dissatisfied with these outcomes. In this factor (i.e., Learning Outcome) it was clear that the students were not satisfied with the relationship between the objectives of their online courses and its related educational activities, as Item 7 (i.e., “The objectives of each of the online courses helped guide my learning activities ”) was the least satisfied by the students. These results may indicate that students in the preparatory year program at UQU were expecting better outcomes from their e-learning. In general, the preparatory year students were somewhat satisfied with the experience they had in distance education ($M=3.66, SD=1.20$; see Table 3). This was evident from their endorsement of the “Agree and Strongly Agree” options on their answer to the last answer in the scale (Item 26, “In general, I am satisfied with the online learning.”)

Table 6. Mean and Standard Deviation for all Items in the Learning Outcome Factor

No	Statement	M	SD
4	I find it important to be provided with the learning objectives of a course in the online learning	2.43	.97
5	The objectives for my online course were provided at the beginning of my courses and were clearly described	2.46	1.08
6	The course objectives for my online courses were closely related to what I was expected to learn.	3.49	.94
7	The course objectives for my online courses assisted with guiding my learning activities	3.60	1.09

7.4 Research Hypothesis 1 (H01)

The first hypothesis that this study was trying to test was about whether there was a difference between students' satisfaction in the preparatory year program at UQU about their experience in e-learning based on their gender. To test this hypothesis, the independent samples t-test was used. This hypothesis was examined in all five factors of the scale (i.e., learning outcomes, assessment and evaluation, learning resources & materials, learner interactions, and course technology. The results of t-test across all the factors showed that there was no difference between students in the preparatory program at UQU on their satisfaction with their experience in the distance education (all $p > .05$; see Table 7). These results indicate that both male and female students at Umm Al-Qura have the same level of satisfaction regarding their online learning. Results of t-test for students' satisfaction about their online learning based on gender are reported in Table 7.

Table 7. Results of T-test for Students' Satisfaction Based on their Gender

Factor of Learning Outcomes						
Gender	N	M	SD	t	df	p
Male	64	3.02	.367	.269	109	.866
Female	47	3.00	.347			
Factor of Assessment and Evaluation						
Male	64	3.65	.82	.315	109	.754
Female	47	3.60	.71			
Factor of Learning Resources & Materials						
Male	64	3.61	.76	.182	109	.856
Female	47	3.59	.67			
Factor of Learner Interactions						
Male	64	3.68	.77	1.21	109	.228
Female	47	3.52	.64			
Factor of Technology						
Male	64	3.64	.71	.842	109	.402
Female	47	3.53	.64			

7.5 Research Hypothesis 2 (H02)

The second hypothesis that tested in this study was related to the satisfaction of preparatory year students at UQU with their experience in distance education, based on the location of their study (i.e., main campus vs branches). This hypothesis

stated that there is no difference in students' satisfaction about their online learning based on the place of their study. As in the test of the first hypothesis, this hypothesis was examined on all the five factors in the scale. Since there were two different samples, the independent t-test was used to test this hypothesis. For the purpose of testing this hypothesis, students from different UQU branches were combined together to compare their satisfaction with students at the main campus (i.e., in Makkah City). The results of the t-test indicated that there was no difference between the preparatory year students in their satisfaction with the distance learning experience depending on the location of their studies, all of them had the same level of satisfaction in all five factors (all $p > .05$; see Table 8). These results showed that students of preparatory year program in all UQU locations had the same level of satisfaction about online learning in general. These results supported the null hypothesis which stated that there is no difference between preparatory years students on their satisfaction about the online learning based on the place of their study.

Table 8. Results of T-test for Students Satisfaction Based on Location of their Study

Factor of Learning Outcomes						
Location	N	M	SD	t	df	p
Main	42	12.21	1.37	1.26	109	.209
Branches	69	11.88	1.31			
Factor of Assessment and Evaluation						
Main	42	18.26	4.02	.323	109	.747
Branches	69	18.01	3.80			
Factor of Learning Resources & Materials						
Main	42	17.71	3.94	-.672	109	.503
Branches	69	18.18	3.34			
Factor of Learner Interactions						
Main	42	14.35	3.01	-.264	109	.792
Branches	69	14.51	2.83			
Factor of Technology						
Main	42	14.07	3.14	-.820	109	.383
Branches	69	14.54	2.43			

8. Discussion

The main goal of this study was to measure the satisfaction of preparatory year students at UQU with their experience in distance education during the Covid-19 pandemic. The importance of this study came from the standpoint that the studies that focus on the level of satisfaction of preparatory year students are very few at the level of Saudi universities, or almost non-existent. To achieve the goal of this study, Aman's Satisfaction Instrument (Aman, 2009) was used after it has been translated into Arabic to be appropriate for the target population (i.e., Preparatory year students at Umm Al-Qura University in SA). The results of this study showed that preparatory year program students at UQU were somehow satisfied with their distance education experience during the Covid-19 pandemic (See table 3). Preparatory year

students at UQU showed general satisfaction with their experience in distance education during the Covid-19 pandemic, which may indicate that e-learning was an effective and successful method for students with the presence of this crisis, Unlike some previous studies that found some problems related to distance learning among students (Ivanov, 2020; Owusu-Fordjour, Koomson & Hanson, 2020).

The findings here are directly in line with previous studies that were interested in the satisfaction of students in SA with online learning in general (Abdel-Jaber,2017; Al-Fahad, 2010, Almusharraf & Khahro,2020; Al-Qudah, 2021; Alzahrani,2017). The results in this study revealed that evaluation and tests were the most satisfied aspect of distance learning by preparatory year students, and these results are consistent with the results of (Almusharraf & Khahro,2020) study that examined Saudi students' satisfaction with distance education. One of the reasons that contributed to this high satisfaction among students about the evaluation aspect of distance education may be due to the change of evaluation plans in many Saudi universities to take into account students during this crisis and help them mitigate the consequences of this epidemic in their scientific journey. Another reason for this good satisfaction in the assessment aspect of the distance education by students may be due to the diversity of assessment methods provided by faculty members in Saudi universities, where the focus was somewhat less on exams and tests. Moreover, the students showed an average satisfaction in some other factors (i.e., learning resources & materials, learner interactions, and course technology), which support some results of a study on university students' satisfaction with e-learning (Alqurashi,2019; Almusharraf & Khahro,2020).

Contrary to the results of previous studies that found high satisfaction by students with e-learning outcomes (Alqurashi,2019; Moore, 1991; Ikhsan, Saraswati, Muchardie, & Susilo,2019), the satisfaction of the preparatory year students with e-learning outcomes was low in this study compared to their satisfaction with other factors. This noticeable decrease in students' satisfaction with their e-learning outcomes may be due to many reasons that may be related to the learning process, the lecturers, or the students themselves. One of the important causes for this decline in students' satisfaction with e-learning outcomes is may due to the fact that the e-learning experience is considered new to students, and they are not accustomed to it as they are used to traditional learning. Overall, the preparatory program students at UQU showed good satisfaction about their distance learning experience in general.

This study was also interested in examining the effect of some factors (i.e., gender and location of study) on the satisfaction of preparatory year students at UQU about their e-learning experience. The results of this study revealed that there was no statistically significant difference on students' satisfaction with the distance learning experience based on the gender factor, as both male and female students showed the same level of satisfaction. These findings are consistent with research showing that no effect for gender on the students' satisfaction about online learning (Al-Juda,2017; Hussain,2007). However, some studies in the Saudi context found that there was a difference between male and female students on their satisfaction with the online education (Alzahrani, 2017). In addition to gender factor, this study found out that there was no difference between preparatory year students on their experience on the distance education based on the location of their study, as students from all UQU locations indicated the same level of satisfaction. Both of these results supported the two null hypotheses, where there was no difference on preparatory program year students on their satisfaction about the distance learning based on the factors of gender and location of the study.

9. Conclusion

Students in the preparatory year program at UQU were satisfied with their experience on the distance education during the Covid-19 pandemic. They showed a high level of satisfaction on the evaluation aspect of this experience, while the learning outcomes were the real issue with the online learning, as they were not fully satisfied with them. They were no effect for gender and the location of study on the satisfaction of students with the online learning. Saudi universities should continue to work to create a suitable learning environment for students at the e-learning level. Future research should consider looking into other factors of students' satisfaction such as the technical support from the university and the use of technology from students.

References

- [1] Abdel-Jaber, H. (2017). Experimental analysis of students' satisfaction factors in e-Learning environment: A case study on Saudi arabian university. *Journal of Information & Knowledge Management*, 16(02), 1750018.
- [2] Al-Asmari, Ali & Khan, Shamsur. (2014). E-learning in Saudi Arabia: Past, present and future. *Near and Middle Eastern Journal of Research in Education*, 2(1), 2-11.
- [3] Al-Fahad, F.N., (2010), The Learners' Satisfaction Toward Online E-Learning Implemented In The College Of Applied Studies And Community Service, King Saud University, Saudi Arabia: Can E-

- Learning Replace the Conventional System of Education?, *Turkish Online Journal of Distance Education*, 11 (2): pp. 61-73.
- [4] Alghamdi, O. S. (2015). Satisfaction of Preparatory Year Students with University Services. *World Journal of Education*, 5(5), 117-129.
- [5] Alhaythami, H. M. (2020). *The Psychometric Properties of the Arabic Versions of the Social Networking Time Use Scale and the Social Media and Academic Performance of Students Scale among University Students in Saudi Arabia* (Doctoral dissertation, Kent State University).
- [6] Aljaber, Abdullah. (2018). E-learning policy in Saudi Arabia: Challenges and successes. *Research in Comparative and International Education*, 13(1), 176–194.
- [7] Aljabre, A. (2012). An exploration of distance learning in Saudi Arabian universities: Current practices and future possibilities. *International Journal of Instructional Technology and Distance Learning*, 9(2), 21-28.
- [8] Al-Juda, M. Q. B. (2017). Distance Learning Students' Evaluation of E-Learning System in University of Tabuk, Saudi Arabia. *Journal of Education and Learning*, 6(4), 324-335.
- [9] Almusharraf, N., & Khahro, S. (2020). Students satisfaction with online learning experiences during the COVID-19 pandemic. *International Journal of Emerging Technologies in Learning (IJET)*, 15(21), 246-267.
- [10] Al-Qudah, F. H. (2021). Evaluating the Quality of E-Learning and its Impact on the Degree of Satisfaction of University Students: A case study – Taibah University. *Journal of the Islamic University of Economic and Administrative Studies*, 29 (1), 2410-5198.
- [11] Alqurashi, E. (2019). Predicting student satisfaction and perceived learning within online learning environments. *Distance Education*, 40(1), 133-148.
- [12] Alturki, Uthman. (2014). The development of online distance education in Saudi Arabia. Retrieved July 28, 2021, from <http://elearmag.acm.org/archive.cfm?aid=2673861>.
- [13] Alzahrani, M. G. (2017). Student Satisfaction with Using Online Discussion Forums at Saudi Universities. *World Journal of Education*, 7(2), 1-10.
- [14] Aman, R. R. (2009). *Improving student satisfaction and retention with online instruction through systematic faculty peer review of courses*. [Dissertation, Oregon State University, USA].
- [15] Basith, A., Rosmayyadi, R., Triani, S. N., & Fitri, F. (2020). Investigation of Online Learning Satisfaction During COVID 19: In Relation to Academic Achievement. *Journal of Educational Science and Technology (EST)*, 1(1).
- [16] Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309–319.
- [17] Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1), 98.
- [18] Crocker, L. M., & Algina, J. (2008). *Introduction to classical and modern test theory*. Mason, Ohio: Cengage Learning.
- [19] Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- [20] Fee, K. (2009). *Delivering eLearning: A complete strategy for design, application and assessment*. London and Philadelphia: Kogan Page.
- [21] Fowler Jr, F. J. (2013). *Survey research methods*. Sage publications.
- [22] George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference*. Routledge.
- [23] Hussain, I. (2007). A study of student's attitude towards virtual education in Pakistan. *Turkish Online Journal of Distance Education*, 8(2), 69-79.
- [24] Ikhshan, R. B., Saraswati, L. A., Muchardie, B. G., & Susilo, A. (2019, October). The determinants of students' perceived learning outcomes and satisfaction in BINUS online learning. In *2019 5th International Conference on New Media Studies (CONMEDIA)* (pp. 68-73). IEEE.
- [25] Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E: Logistics and Transportation Review*, 136, 101922.
- [26] Kamel, J. (2015, April). *Preparatory year programs at the Saudi universities "a reading in the paradox between philosophy and structure"*. Paper presented at the First National Conference of Preparatory Year in Saudi Universities, Dammam, Saudi Arabia. Abstract retrieved from <http://prep1sa.uod.edu.sa/Default.aspx>
- [27] Moore, M. G. (1991). Editorial: Distance education theory. *American Journal of Distance Education*, 5(3), 1-6.
- [28] Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
- [29] Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). The impact of Covid-19 on learning-the perspective of the Ghanaian student. *European Journal of Education Studies*.
- [30] Simpson, J. M. (2012). *Student perceptions of quality and satisfaction in online education*. [Doctoral Dissertation, The University of Alabama, USA].
- [31] Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48(6), 1273-1296.
- [32] Van Griethuijsen, R. A., van Eijck, M. W., Haste, H., den Brok, P. J., Skinner, N. C., Mansour, N., ... & BouJaoude, S. (2015). Global patterns in students' views of science and interest in science. *Research in science education*, 45(4), 581-603.



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