
Students Satisfaction about Distance Learning during Lockdown of Covid-19 Pandemic at the University of Jordan

Ana'am Alkharabsheh ^{1*}, Ferial Abu Awwad ²

- 1 Department of Hearing and Speech Sciences, Faculty of Rehabilitation Sciences, University of Jordan, Queen Rania Al Abdallah St. Amman, Jordan, 11942.
- 2 Department of Educational Psychology, Faculty of Education, University of Jordan, Queen Rania Al Abdallah St. Amman, Jordan, 11942.

*Ana'am Alkharabsheh: e.kharabsheh@ju.edu.jo/Anaamahm@buffalo.edu

ABSTRACT

The Coronavirus (COVID-19) pandemic, which has affected most countries of the world, has caused significant changes in the activities of many institutions and organizations. The transition to work under quarantine had a rather painful effect on the activities of universities. Educators, psychologists, instructors, parents and students themselves are just beginning to analyze a new and unexpected experience of Online Learning (OL). To study the student's satisfaction, struggles and obstacles about the experience of OL, primary data has been collected from graduate and undergraduate students at the University of Jordan. We recruited 386 students in this study from all majors at the University of Jordan. The results of this study reflect the student's satisfaction about the online experience and highlight the challenges the students had during the OL process, and how it affects their interest in distance learning and their performance. In conclusion, this study shows that students were not satisfied about the OL during the period of COVID-19 pandemic, and highlighted the technical and personal challenges which have affected their experience of distance learning particularly the scientific faculties more than health and humanistic ones.

Keywords

Distance learning, Student's satisfaction, COVID-19 pandemic, University of Jordan.

Introduction

The global community experiences a hard time during the last month of 2019 and the first quarter of 2020. The Coronavirus (COVID-19) pandemic spread out in the world affected many aspects of human endeavour: from the decline in the world economy to the global re-adjustments in the academic calendar of all educational institutions. Decisions makers and principles of higher educational institutions have no other options but to move to OL for the continuation of academic activities across all schools worldwide [1], [2].

Education generally plays an important role in cultural development and aims to improve the personal skills in different aspects in life. Education provides a pathway to the destiny and inculcating social responsibilities as well [3]. The main essence of education is to learn. Learning is a process of gaining knowledge or skills through study, experience, or being taught. Any big changes such as war or spread of fetal diseases in the world usually affect the education sector as well as other sectors. Recently, the

pandemic of COVID-19 has left its impact on education worldwide. The outbreak of this contiguous pandemic across the globe has forced educational institutions to shutdown hoping to control the spread of this virus. As a result, teaching professionals think of alternatives to move the learning process during the lockdown. Web-based learning or E-learning or Distance Learning or Online Learning were the most appropriate method to be used to slide the wheel to finish the academic year [4]. OL means that teachers and students are virtually connected, it basically based on using laptops, desktops, or smartphones and the internet forms as a major components to facilitate the educational process.

Literature Review

Although it is known that online education is not a substitution to face-to-face delivery [5]. OL might be not effective if the courses required technical or personal trainings, or when the courses required applications of knowledge into more real situations and problem solving [6]. Other potential problems for OL are the psychological effects on the learners. Students may experience the sense of isolation as there is no interactive communications with peers or instructors. They may also experience the feeling of frustration, anxiety and confusion [7], [8], [9]. OL as reported by [10], [11] requires great discipline, writing skills, self-motivation, and commitment to learn. On the other hand, OL adds flexibility and convenience to complete learning units when and where the learner desires. Additionally, OL can save the students time and reduce the cost as it is not requiring commute to school. OL also, can be considered more efficient and standardize in the delivery of the courses content to all students [12], [13].

According to the UNESCO report most academic institutions are now encouraging online education to slide the wheel during this crisis [14]. Over the past decades top ranked

universities are gradually moving their programs online and doing away with face-to-face delivery [5]. Big universities in the world such as Tsinghua, Peking University, Harvard, MIT, Yale, Oxford, Cambridge, among others are moving in this direction [1], [15], [16].

Bao, [16] and Filius et al. [17] argued that moving the education entirely online requires significant planning and investments from all sectors. So, the students and instructors should go through intensive training and should have enough resources such as recording platforms at home and on campus so the instructors can record the lectures and the students can access it to make the OL possible [18]. Therefore, issues such as how the instructors will proceed with OL should be evaluated before institutions decide to teach the students remotely in this COVID-19 era. This is because posting PowerPoint slides for students to read does not constitute online teaching. In addition, the issue of accessibility of the material posted online should be discussed. The universities should have a robust online platform so the instructors can record and present the material and the students should have the means to access the materials such as a laptop/tablet or a good phone even from their homes. Otherwise, the OL can be inoperable [17].

Significance of this Study

This study aims to explore the student's attitudes toward the OL during the COVID-19 pandemic and challenges that might affect the OL. This study targets the undergraduate and postgraduate students at the University of Jordan to explore their satisfaction about OL during COVID-19. It can be a learning paradigm in educational institutions to enhance the students' knowledge and skills through digital technologies. Government and Educational Department has to provide better infrastructure for OL for the betterment of students.

Objectives

- 1.To identify students satisfaction toward the OL during COVID-19 pandemic.
- 2.To identify challenges and struggles of OL for the undergraduate and postgraduate students at the University of Jordan.
- 3.To investigate the effect of faculties categories on the degree of challenges of OL.

Research Questions

- RQ1.** How much satisfied are the students about OL during the period of quarantine due to COVID-19 in Jordan?
- RQ2.** What are the challenges and struggles, the students encountered during the online teaching and learning?
- RQ3.** Do challenges of OL affected by categories of faculties'?

Methods

This study is established using primary data. The data have been collected from students who were pursuing their undergraduate and postgraduate degrees at the University of Jordan. Online Google Forms have been used for data collection.

Methodology

The survey was posted on social media such as Facebook and broadcasted using WhatsApp mobile application. The instructions were clear that students are free to participate. No identifying information was needed; names or IDs were not required. According to Toepoel [20], online survey is one of the best means of getting authentic data from the population and cutting down cost when carrying out a study.

Data Analysis

Reliability index using Cronbach's Alpha coefficient was equal to 0.813 which considered suitable for the purposes of this study. 386 samples have been collected from the students

where the OL was used between the period of March and May 2020. This was aiming to ascertain the graduate and undergraduate students at the University of Jordan satisfaction about OL adopted by all institutions of higher education as a result of COVID-19. Table 1 shows the sample distribution according to some variables.

Table 1.Sample distribution according to some variables.

Variables	Values	Frequency	Percent
Grade	Bachelor	321	83.2
	M.A.	33	8.5
	PhD	32	8.3
	Total	386	100.0
Faculties categories	Medical and Health	151	39.1
	Scientific	79	20.4
	Humanistic	156	40.4
	Total	386	100.0
Level	First	105	27.2
	Second	103	26.7
	Third	115	29.8
	Fourth	52	13.5
	Fifth	9	2.3
	Sixth	2	0.5
	Total	386	100.0
Online Experience	Yes	193	50.0
	No	193	50.0
	Total	386	100.0
Owning PC	Yes	239	61.9
	No	147	38.1
	Total	386	100.0

Results

Satisfaction towards the online learning

In this framework student's satisfaction was assessed using a subscale comprises of 10 items; the frequencies related to students satisfaction towards OL are presented in table-

2. The correlations coefficients between these items are expressed using Pearson correlation coefficient, table-3.

Among the 386 respondents surveyed during the quarantine time for COVID-19, around half of the students participated in this survey were unhappy about the OL experience. Interestingly, more than half of the students participated in this study 229 (59.3%) reported dissatisfaction (completely or partially) about the OL. Student's satisfaction about OL was evaluated also by asking the students if they have the choice would they go through the experience of distance learning again. Out of the 386 respondents, only 102 (26.4%) students expressed their willingness to go through the online experience. However, most of the students in our sample 284 (73.6%) think if they have the options to choose; they would not go through the OL experience again. The survey showed that about 26.7% of the students reported that online classes are interesting classes. Around 14% of the students were opined in neutral. Since the educational institutions were required to shutdown due to Coronavirus, these students have found that there is no option other than the OL.

The correlations coefficients between these items that were used to evaluate students satisfaction about the OL were statistically significant, the values ranged between 0.390 and 0.832, correlations are significant for all coefficients at the level of 0.01 (2-tailed).

Ease of use of online learning

In our study, we evaluated the ease of use of OL by the students. Using a scale comprises of 5 items, about 50% of the respondents reported that they went through the experience of OL partially, the number of online courses they studied previously before COVID-19 ranged between 1 and 14 courses. While the other 50% of the students in our sample never had the experience of OL in anyway. Table-4 presented the results of the questions that evaluated how

ease the OL was for the students during the pandemic of COVID-19, and table-5 presents the results of correlations coefficients for the ease of use of OL subscale. The items of this subscale are strongly correlated; the correlations coefficients values ranged from 0.433 and 0.749, correlations are significant for all coefficients at the level of 0.01 (2-tailed).

Technical issues of online learning

The availability of the internet was an issue for some students (Mean=2.05, Std=0.83), out of 386 students 122 (31.6%) reported that mobile data was the only source for the internet to participate in online classes, quizzes and exams. While 122 (31.6%) reported that Wi-Fi was the main source for the internet to be used for OL. 142 (36.8) reported that they were using the mobile data and Wi-Fi for distance learning. Even though the students reported different sources of the internet that was used for distance learning, the accessibility to the internet was varied ((Mean=1.34, Std=0.47), more than half of the collected sample (255 out of 386; 66.1%) reported that the access to the internet was available all the time. While 131 out of 386; 33.9% reported that the internet access was limited to certain time. The access to the internet was ranged from 1 hour to 24 hours per day (Mean=17.54, Std=9.41). 370 out of 386 (95.9 %) reported that they can access the internet 24 hours, only 3 (0.8%) students reported that they did not have access to the internet at all. For the students who had access to the internet all the time or in specific hours (Mean=1.97, Std=0.97), 186 out of 386 (48.2%) reported that they had issues in the speed of the internet all the time. 27 out of 386 (7%) reported that sometimes they experience problems in the speed of the internet. While 173 out of 386 (44.8%) reported that the speed of the internet was good most of the time.

To help the students solve the problem in the availability and the speed of the internet, the University of Jordan started an initiative of

giving free mobile data bundle to students who did not have access to the internet to continue their education (Mean=1.59, Std=0.49). The students had to fill a form available at the University of Jordan website so they can get 4 GB of free internet on their cell phones. Out of the 386 students in our sample 157 (40.7%) found this initiative useful and can help the students. While 229 (59.3%) found this initiative is not helpful. The students complain that even they filled the form to get the free 4 GB of mobile data, they did not get it. While others reported that 4 GB was not enough to help them to follow the online lectures, quizzes, assignments submission and exams. Others reported that this bundle was provided through specific mobile carriers, so some students did not get the bundle as they have different carriers.

Personal issues of online learning

We asked the students how hard it is to use the computer in OL (Mean=2.22, Std=0.71), out of the 386 respondents, 63 (16.3%) think that computers are complicated and hard to use when it comes to OL. While 149 (39.6%) think

that using computers in OL are not always hard. While the other half of the sample; about 174 (45.1%) think that computers are not hard to use in distance learning. For the internet use (Mean=2.10, Std=0.68), 71 students (18.4%) think that internet is not easy to use, 110 students think that internet is sometime hard to use. While more than 50% of the students in our sample (205 students), think that internet is easy to use and can be useful in OL.

Other than the ease of use of the computers and the internet, in our sample we asked the students about the availability of personal computers to be used during the time of lockdown to ensure continuing of education. We found that in Jordan high percentage of college students belong to low- mid income families. Therefore, the availability of personal devices is not affordable for all students (Mean=1.38, Std=0.49). Out of 331 students only 63 participants (16.3%) have their own personal computers, and most of them are graduate students. While 268 (69.4%) of the students do not have their own personal computers. In our sample 55 subjects

Table 2. Frequencies related to students satisfaction towards online learning.

	Satisfied	Neutral	Not-satisfied	Total
Online classes are an interesting classes	26.7% (103)	14% (54)	59.3% (229)	100% (386)
Distance learning experience helps to improve and develop skills related to the field of specialty	22.5% (87)	12.2% (47)	65.3% (252)	100% (386)
Distance learning experience is more satisfactory than the traditional learning in lectures halls	17.4% (67)	10.4% (40)	72.2% (279)	100% (386)
Feeling of achievement by doing the work that distance learning requires	35.5% (137)	13.7% (53)	41.5% (196)	100% (386)

Distance learning experience reduces the stress that is usually accompanies traditional learning through lectures	33.4% (129)	15.5% (60)	50.8% (197)	100% (386)
I feel that I am doing the right thing by continue the education through distance learning instead of dropping out	49% (189)	16.8% (65)	34.1% (132)	100% (386)
I am generally satisfied with the distance learning experience	33.4% (129)	15.5% (60)	51.1% (197)	100% (386)
I am happy to be able to go through distance learning experience	33.4% (129)	20.5% (79)	46.1% (178)	100% (386)
If distance learning is compared to traditional learning in lectures halls; distance learning is better than traditional learning	36.8% (142)	10.9% (42)	52.4% (202)	100% (386)
The negatives associated with distance learning experience are less than the positives, so distance learning is an effective learning method	21% (81)	11.9% (46)	67.1% (259)	100% (386)

Table3. Pearson correlation between the items of "student's satisfaction towards online learning".

	1	2	3	4	5	6	7	8	9	10
1. Online classes are an interesting classes	1	.797**	.726**	.649**	.489**	.659**	.801**	.773**	.714**	.729**
2. Distance learning experience helps to improve and develop skills related to the field of specialty		1	.714**	.646**	.502**	.614**	.736**	.729**	.629**	.658**
3. Distance learning experience is more satisfactory than the traditional learning in lectures halls			1	.622**	.488**	.539**	.653**	.638**	.621**	.619**

4. Feeling of achievement by doing the work that distance learning requires			1	.447**	.629**	.664**	.650**	.521**	.598**
5. Distance learning experience reduces the stress that is usually accompanies traditional learning through lectures				1	.390**	.488**	.514**	.444**	.485**
6. I feel that I am doing the right thing by continue the education through distance learning instead of dropping out					1	.718**	.690**	.481**	.583**
7. I am generally satisfied with the distance learning experience						1	.832**	.642**	.683**
8. I am happy to be able to go through distance learning experience							1	.635**	.677**
9. If distance learning is compared to traditional learning in lectures halls; distance learning is better than traditional learning								1	.621**
10. The negatives associated with distance learning experience are less than the positives, so distance learning is an effective									1

learning method										
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did not answer this question. In addition to the ownership of personal computers, most students (294 out of 386) have at least one sibling who is studying through OL (Mean=1.24, Std=0.43). Some students reported that there are another 8 individuals who are studying remotely at the same time. For the students who do not have their own personal computers and at the same time have other family members who are studying remotely they had to coordinate the use of the computer between family members (Mean=2.25, Std=0.72), out of 306 respondents 50 students only (13%) reported that it was easy to coordinate and arrange the use of the computer for OL. 125 students (32.4%) said it was not always easy to arrange the use of the computer between family members who are studying online. While 131 (33.9%) students said that time management and the coordination between family members were hard.

In this study we also covered questions about other devices that could be used for distance learning such as smart phones (Mean=1.78, Std=0.94). The results show that out of 267 of the students who answer the question “do you use the phone as an alternative for the computer to follow up with online lectures, assignments, quizzes and exams”, 154 (39.9%) reported that they used their phones as a major device for learning. 96 (24.9%) students reported that they used the phone for learning sometimes. Only 17 (4.4%) of the respondents did not use their phones for distance learning and depend mainly on their computers; laptops or desktops. From the opinion of

those who used the phone in distance learning (Mean=2.15, Std=0.66), out of 320 students, only 50 (13%) students think that smart phones are a reliable and useful alternative to be used for OL. 98 (25.4%) respondents think that phones are sometimes do the job for OL. While most respondents to this question; 172 (44.6%) think that phones do not do the job reliably and completely.

Improvement of student’s commitment through distance learning

In our study, 131 out of 386 students (33.9%) reported that through distance learning they become more willing to learn and acquire different skills to be more independent learners. While 160 of the 386 students (41.5%) reported that distance learning did not change their willingness to learn and to become more independent learners. The other 95 students of the 386 sample (24.6%) reported that distance learning sometime improves their willingness to learn independently and sometime it is not. Table-6 presented the results of the questions that evaluate how the student’s commitment affects the learning process during the pandemic of COVID-19. Also, the results of the correlations coefficients between these items that evaluate the effect of OL on student’s commitment were reported in table 7. The results show that the correlations coefficients were statistically significant between most of the items. The correlations values ranged between 0.029 and 0.592 between the different items. However, it seems that item (2) does not have a correlation with items (1) and (4), so it could be

considered for exclusion from the input variables set, or it could be modified because its discrimination index is 0.107.

Flexibility of self-study through online learning

During this time of global medical emergency, as most institutions moved to OL, the learning process becomes more

flexible in term of the time and the content of teaching materials. In our survey, from the 386 respondents 185 students (47.9%) think that distance learning give them the flexibility to choose the time to study, so they are not restricted with the time as in traditional lectures (Mean=1.78, Std=0.83). 100 students (25.9%) think that this flexibility is dependent, sometime

Table 4. Ease of use of online learning.

	Satisfied	Neutral	Not-satisfied	Total
Technology used in distance learning experience are easy to use and available to all	39.1% (151)	14.2% (55)	46.6% (180)	100% (386)
It is easy to submit assignments electronically	61.1% (236)	10.4% (40)	28.5% (110)	100% (386)
It's easy to do quizzes electronically	39.9% (154)	16.1% (62)	44.1% (170)	100% (386)
It's easy to get feedback on homework received electronically	37.3% (144)	19.7% (76)	42.9% (166)	100% (386)
It's easy to get feedback for the short exams that are done electronically	31.3% (121)	22.5% (87)	46.1% (178)	100% (386)

they are time restricted and sometime they are free. While 101 (26.2%) of the respondents, think that distance learning

is similar to traditional learning in term of time restriction. So that, OL is not giving them the freedom to choose the time to study. As a result of the flexibility to

learn online, some students think that life style and daily routine was affected (Mean=1.98, Std=0.69).

Table 5. Pearson correlation between the items of "ease of use of online learning".

Items	1	2	3	4	5
1. Technology used in distance learning experience are easy to use and available to all	1	.587**	.433**	.461**	.434**
2. It is easy to submit assignments electronically		1	.578**	.580**	.489**
3. It's easy to do quizzes electronically			1	.571**	.693**
4. It's easy to get feedback on homework received electronically				1	.749**
5. It's easy to get feedback for the short exams that are done electronically					1

95 (24.6%) out of 386 students felt that with OL they can arrange their life activities in a more flexible way. While the majority of the students in our sample

203 (52.6%) felt that OL becomes a restriction and they are not flexible in running their daily routine. The 88 students left from this sample felt that

flexibility in their daily life is sometime better with OL and sometime it is not.

The OL adds more flexibility to some student's life in different ways.

Table 6.Improvement of student's commitment through online learning.

	Satisfied	Neutral	Not-satisfied	Total
Distance learning help the students to improve their academic interests	31.9% (123)	23.8% (92)	44.3% (171)	100% (386)
Grade C or less makes the students feel unsatisfied about their academic performance	86.5% (334)	7.5% (29)	6% (23)	100% (386)
Distance learning gives the students who are eager to stay updates in their fields of studying the chance to search and stay connected with innovations in their fields	51.6% (199)	23.1% (89)	25.3% (98)	100% (386)

Regardless of the learning style; traditional or distance learning students belief they have to work hard to get good grades	84.7% (327)	8% (31)	7.2% (28)	100% (386)
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Table 7. Pearson correlation between the items of "improvement of student's commitment".

Student's commitment items	1	2	3	4
1.Distance learning help the students to improve their academic interests	1	.038	.249**	.592**
2.Grade C or less makes the students feel unsatisfied about their academic performance		1	.205**	.029
3.Distance learning gives the students who are eager to stay updates in their fields of studying the chance to search and stay connected with innovations in their fields			1	.361**
4.Regardless of the learning				1

style; traditional or distance learning students belief they have to work hard to get good grades				
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Some students translate this flexibility of OL through staying home and save the commute time (Mean=1.62, Std=0.85). Out of the 386 students 239 (61.9%) agreed that OL saved their time. 93 students (24.1%) think that staying home and not to commute is not always a time saver. Only 54 (14%) of our sample disagree that OL saves their time to commute to school.

The flexibility of OL also includes the freedom to learn from different resources as the internet becomes the major resource for learning as a result of COVID-19 pandemic. Student's opinion about the usefulness of using the internet to learn from additional resources varies (Mean=2.00, Std=0.87). 145 (37.6%) of the students agree that OL gives them the chance to enrich their learning experience and to learn from different resources. Same number of students from our sample 145 (37.6%) think that the use of the internet during OL experience was not always adding the freedom and the flexibility to learn from different resources.

Student's satisfaction about the instructors

Student's satisfaction about the instructor's role during the period of quarantine when OL was the only way to reach out to the students varies widely.

The satisfaction about the role of the instructors was measured by asking the students to rate how the instructors were responding to their needs from different perspectives. In this study, the items that measured the student's satisfactions about the instructor's role in the OL process are presented in table-8. The correlations between these items are presented in table 9. The correlations coefficients values ranged from 0.705 and 0.808, correlations are significant for all coefficients at the level of 0.01 (2-tailed).

Challenges of online learning affected by the categories of faculties'

To investigate the effect of faculties' categories variable on the degree of the challenges of OL, means and standard deviations were found according to each category of the faculties, table 10 shows that.

Then, one-way ANOVA was found to compare the difference between different faculties. We compared Medical and Health with Scientific and Humanistic faculties and the results are presented in Table 11. Table 11 shows that there is a significant difference in the degree of challenges about distance learning due to categories of faculties. So, Scheffe test for multiple comparisons was explored as it is shown in table 12. It is noted that challenges faced Scientific faculties were more than those faced Health and Humanistic faculties.

Discussion

The findings of this study are based on the primary data collected from postgraduate and undergraduate students at the University of Jordan which reflect the student's satisfaction about OL and the challenges that might affect the process of OL. About 50% of the

respondents reported that they went through the experience of OL. While the other 50% of the students in our sample never had the experience of OL in anyway. Also, about half of the students in our study were not satisfied about OL. Students may have different learning and cognitive styles which could affect the learning process and consequently reflect their satisfaction [20].

Table 8. Student's satisfaction about the instructor's role through distance learning.

	Satisfied	Neutral	Not-satisfied	Total
Students are satisfied about instructors guidance during the distance learning experience	34.7% (134)	20.7% (80)	44.6% (172)	100% (386)
Students are satisfied about the respect from their instructors during the distance learning experience	54.1% (209)	20.2% (78)	25.6% (99)	100% (386)
Students are satisfied about the help they receive from their instructors during the distance learning	40.2% (155)	16.8% (65)	43% (166)	100% (386)

experience				
Students are satisfied about the feedback they receive from their instructors during distance learning experience	36% (139)	17.4% (67)	46.6% (180)	100% (386)

Some students prefer traditional learning style, direct interaction and communication with the instructor than passive method of learning [20].

Moreover, student's perceptions, motivation and persistence could also attribute to students satisfaction about the OL [21]. Students with negative believes, and low self-esteem could experience frustration about OL compare to

Table 9: Pearson correlation between the items of "The instructor's role through distance learning".

The instructor's role items	1	2	3	4
1.Students are satisfied about instructors guidance during the distance learning experience	1	.730**	.808**	.771**
2.Students are satisfied about the respect from their instructors during the distance learning experience		1	.765**	.705**
3.Students are satisfied about the help they receive from their instructors during the distance learning experience			1	.781**

4.Students are satisfied about the feedback they receive from their instructors during distance learning experience				1
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students with positive attitudes and high self-esteem [22]. The correlations coefficients between the items in the subscale that evaluates the students satisfaction were significant indicating that these items are highly load on the factor that evaluates the student's satisfaction about the OL. For students satisfaction about the instructors role in the process of OL, a subscale comprises of 5 items was used and the correlations coefficients between these items were strong indicating that these items are highly load on the factor that evaluates the student's satisfaction about the instructor's role in the OL process. About half of the students were not satisfied about the instructor's guidance, help and feedback during the distance learning experience, but around 50% of them were satisfied about the respect they received from their instructors. This dissatisfaction about the instructor's performance could be affected by different variables such as the course design, the instructor's communication skills and personality [20].

The use of technology in the field of education was more commonly used within the past two decades. There have been increased levels of erudition and efficiency in the number of schools that have embraced digital learning [23]. According to UNESCO (2020) report [24], around 87% (~1.5 billion

learners) in 165 countries are engrossed by COVID-19 school closure.

According to education think-tank the "Times Higher Education" a survey targeted leaders of major universities in the world in 2018, about 200 respondents participated from 45 countries across the 6 continents agreed on the fact; that online education cannot match the normal face-to-face teaching method. However, 63% of the respondents predicted that most prominent universities in the world will be offering their full courses online by 2030.

However, only 24% of the respondents agreed that distance learning would be more dominant than traditional learning. The revolution of information and global based availability has a major impact on contemporary education. It is playing a major role in all new preceptorial skills in education at all levels. There are many available resources online to learn from wherever it's needed. Digital devices and gadgets do not only provide students to participate in entertainment, but also make more opportunities for them to engage in learning activities.

TTable 10. Means and standard deviations according to each category of the faculties.

Table 11.One-way ANOVA results for the significance of the difference between faculties in the degree of challenges about distance learning

Faculties	N	Mean	Std. Deviation
Medical and health	151	113.23	31.72
Scientific	79	124.28	29.44
Humanistic	156	112.76	33.59
Total	386	115.21	32.29

due to categories of faculties.

Faculties (I)	Faculties (J)	Mean Difference (I-J)	Std. Error	Sig.
Health	Scientific	-11.05*	4.45	0.05
	Humanistic	0.47	3.66	0.99
Scientific	Humanistic	11.52*	4.43	0.04

Table 12.Scheffe test for multiple comparisons of the significant difference between faculties in the degree of challenges about distance learning due to categories of faculties.

Resources	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8027.78	2	4013.89	3.91	0.02*
Within Groups	393368.96	383	1027.07		
Total	401396.74	385			

In our study the availability of devices to be used for OL and the speed of the internet were an issue for some students. OL depends strongly on using desktops, laptops and the smart phones. Also, internet connections with high band are crucial.

Challenges of having a personal computer and the lack of connectivity and an acute power shortage were a struggle for the students during the lockdown period. More than half of the students participated in our study do not have their own personal computers as we predicted that in Jordan high percentage of the college students belong to low- mid income families [25]. Thus, having a shared computer with other family members has an effect on the students' performance as the time management and the coordination between family members for the students who have more than one individual study online were hard. Therefore, students with siblings studying online may be reinforced to use smart phones as an alternative for personal computer. About half of the study sample reported that they used their phones as a major device for learning. However, they think that phones do not do the job reliably and completely. This could be related to the fact that the phones screens are smaller than the computers and this may negatively affect their vision. These smalls' screens add more difficulties to read the content and input text with online keyboard, in addition to technical problems such as the internet connections and software and hardware connections. Moreover, using smart phones could be a distraction for the students whodo not stay focused on the assigned tasks [26].

According to United Nations Development Programme and United Nations Children's Fund (UNDP and UNICEF, 2015), there is inequality of accessing theinternet services in Jordan: only 27 % of the poorest quintile own a computer and only 2 % have internet

access at their homes [27]. Online Learning is even worse in rural areas compared to urban due to lack of infrastructure which is required for OL. Students reported many problems that affect the quality of distance learning.

Challenges that might affect the quality of OL are not only related to the availability of smart devices and the internet. Also, personal challenges related to the skills of using the computer and the internet were barriers that affect the OL process. In our study, about 50% of our sample thinks that computers are hard to use in distance learning. Using distance learning placed more responsibilities on the students than traditional face-to-face learning. This includes the ability to access internet links to download course materials, post and participate in online discussions, or meet deadlines that do not correspond with class lectures. Thus, computers skills and self-regulated learning are necessary for OL to be successful. In general, challenges faced scientific faculties were more than those faced health and humanistic ones. This could be referring to the fact the scientific faculties depend mainly on quantitative science and measures, so they need labs, especial equipment's and strong networks to acquire the required skills in their specialty. While in humanistic the main focus is on qualitative measures. Therefore, OL could affect the scientific faculties more than humanistic [28].

Online Learning required the students to become active rather than passive learners. Self-motivation requires students to commit to the course and to take the advantage from technology. Past researches suggested that students with strong commitment will be more successful and become independent

learners in web enhanced courses than those with less motivation [29], [30]. In our survey about half of the students participated in our study reported that distance learning did not change their willingness to learn and to become more independent learners. This result could be due to the sample characteristics, and the variability between them, for example, MA and Ph.D. students might have different attitudes towards OL compared to BA students. Also, we found around 50% of our sample in this study think that distance learning gives them the freedom to choose the time to study, so they are not restricted with the time as in traditional lectures. However, in term of the freedom to run the daily activities more than 50% of the sample in our study felt that OL becomes a restriction and they are not flexible in running their daily routine. The students agree that OL gives them the chance to enrich their learning experience and gives them the chance to learn from different resources. However, we found that the number of the students who think that the use of the internet during OL experience was not always adding the freedom and the flexibility to learn from different resources is equal to the number of the students who think that OL gives them the chance to enrich their learning experience and gives them the chance to learn from different resources. Student's also reported that the place of living affects their satisfaction about OL.

Studying online was reported to be a time saver for more than half of our sample as the students save the time to commute to school. Their answers to the question that OL saves commute time was affected mainly by the fact that some lives close to their school while others have to commute from other cities. The University of Jordan is located in the middle of the capital; Amman, and it is

the highest ranked university in Jordan. Thus, the students are usually willing to commute from all cities in Jordan to study at the University of Jordan. However, Amman was known lately with the traffic jam, and most of the students were affected by this jam [31]. Thus, staying home and learning online for some was a saver.

Conclusion

Online Learning becomes unavoidable due to the spread of COVID-19. This method was the most suitable for everyone as a result of shutdown of all educational institutions; it is available and comfortable for those who are willing to learn. The findings of this study show that the student's satisfaction about OL was measured using different perspectives. Overall, the students were not satisfied about OL experience and the infrastructures need to be improved to boost the student's satisfaction. Also, scientific faculties were facing more challenges either personal or technical than the health and humanistic faculties.

The findings from this study will be of much benefit to the University of Jordan administrators and management in taking future emergency decisions concerning the implementation of OL programs for students from different backgrounds.

Limitations and Future Studies

Further research can continue to explore factors that might enhance the OL process. For instance, explore motivational factors that might affect the student's commitment to study more independently. Also, more advanced statistical analyses are needed such as factor analysis and correlations coefficients to look closely at the

subscales that were used in this study and adjust them where it's needed.

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