Faculties' Satisfaction With Distance Education During COVID-19 Outbreak in Jordan

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Although online teaching has been implemented worldwide, specifically in higher education, resistance to technology use exists, as faculty members may lack technology familiarity and may require both guidance and training. The present study evaluated faculty members' satisfaction towards distance teaching as imposed during the COVID-19 pandemic. An online survey which evaluated socio-demographics and faculties 'satisfaction toward distance education was validated and completed by 286 faculties from different faculty-fields of education across all Universities in Jordan. Factor analysis was conducted to validate the questionnaire and univariable analysis was conducted to evaluate demographic variables association with satisfaction degree. The confirmatory factor analysis indicated that the most suitable structure for the study data was a 3-factor model constructed from 21 items. The three factors were students-related factor, institution-related factor and technology-related factor. The scores for the three factors were 2.66, 2.00 and 3.33 out of 5 respectively. Faculties who received training for online teaching and those who have attended courses as a trainee were more satisfied with distance education. In conclusion, the faculties' low satisfaction level reported in the present study shows margin for distance education improvement by conducting intensive training courses for online teaching with the aim of improving faculties' satisfaction levels towards a web-based teaching environment and hence improving education outcomes.

Keywords: distance education, faculties, satisfaction, COVID- 19, Jordan

INTRODUCTION

Traditional learning is a type of education that involves the gathering of a teacher and group of students at a facility where face-to-face learning interactions occur (Ciccarelli, 2020). Currently, with the rise of the COVID-19 pandemic, distance learning is progressively becoming a more fundamental part of education with the help of "e-learning", rather than traditional learning, which is another type of learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom" (Lawless, 2018; World Economic Forum, 2020). The developing attractiveness of this medium for learning may be due to numerous factors with corresponding advantages. Advances in technology have provided the economic advantages of distributing resources to students in remote locations, thus reaching a broader target for distance education; allow students to attain education at suitable times flexible to fit their busy schedules; empower students to build an

atmosphere for learning in an environment opposite to that of the traditional classroom; and additionally, made e-learning a cost-effective method of education (Totaro et al., 2005; Perrin et al., 2015; Kerr-Sims and Baker, 2021). In spite of the advantages of eLearning, disadvantages have equally been identified, including the lack of interaction between both parties due to remoteness, therefore requiring a stronger motivation than required in a traditional classroom; the negative effect on the students' communication skills; and the less efficient technique of learning compared to the face-to-face learning process (Perrin et al., 2015; Masters degree, 2020). Furthermore, not only does the COVID-19 imposition of distance learning affect students, but it equally affects the faculty staff as well. With the adoption of this type of learning medium on the rise, faculty members are required to discover new techniques in order to prepare, organize, deliver, and assess courses and learning materials for online teaching, as it is argued that the online teaching value is different from that in a traditional classroom setting (Martin et al., 2019). Although online teaching has been partially implemented globally, specifically in higher education, resistance to technology use exists, as faculty members may lack technology familiarity and may require both guidance and training (Perrin et al., 2015). Moreover, various factors play a role in the impact on online education and faculty members, including, faculty performance towards the quality of education, faculty readiness to teach online, the instructor's competency and attitude towards online course delivery (Perrin et al., 2015; Martin et al., 2019; Akour et al., 2020). Faculties must also develop instructional strategies in order to improve their students' learning engagement, as dividing the teaching content into smaller portions to aid their focus, improve their speech to help students apprehend key points, and many more (Bao, 2020).

In Jordan, the Ministry of Education is responsible for school education and the Ministry of Higher Education and Scientific Research is responsible for higher education. The education in Jordan begins with pre-primary, followed by 10-years compulsory basic education, then secondary education and higher education. Students who have the general secondary education certificate are qualified for admission to higher education in Jordan. Higher education in Jordan is offered by public as well private higher education institutions, which are community colleges and universities. Universities in Jordan offer a wide range of courses of study at the bachelor, master and doctorate level of studies.

There are limited studies which investigated the imposition of distance learning through digital platforms in regards to higher education faculties as an effect of the COVID-19 pandemic. The gap in the literature includes lack of information about higher education faculty members' experiences, attitudes and perceptions, and how teaching online has affected their role and teaching strategy. Therefore, the purpose of the present study is to assess this impact and the factors associated with its effect on online education provided by different faculties across Jordanian universities.

MATERIALS AND METHODS

Study Design and Subjects
A cross-sectional study was conducted on faculty members from all universities across Jordan in June 2020. All different faculty-fields of education took part in this survey, including those of scientific and nonscientific backgrounds, along with all types of universities, including public and private universities.

Study Participants
The survey was distributed online and was completed by a total of 286 faculty members across Jordan. As shown in **Table 2**, the mean age of the participants was 44.3 years (SD = 9.652). The majority of the participants were males (62.2%) and had a PhD (78.7%) as their highest degree. Most of the participants were assistant professors (36%), had a scientific field of education (79%), work in public universities (67.1%), specialized in the medical field (42.7%) and were a full-time employee (95.8%).

Study Instrument
The data for this study was collected using an online-based survey. The questions of the present survey were adapted from an earlier study that has also investigated faculty perceptions on distance learning (Bolliger and Wasilik, 2009). The survey questions were divided into two parts; the first part included specific questions related to the educational path of each faculty member including degree of study, academic position, field of education and years of teaching experience, while the second part focused on the faculties perceptions towards distance learning, the comparison between online teaching with traditional teaching, the available resources provided for students in an online environment, the pleasure of schedule flexibility, technical problems that may arise with the use of digital platforms, the satisfaction of the use of various online communication tools. Moreover, the survey which was developed originally in English, was translated to Arabic using the back-translation method, in which the forward translated version of the survey in Arabic was closely translated back into its original language in English by an independent translator. This method was used in order to verify that there are no differences between the translations, considering not all faculty members have a background in the English language. Pilot work was done by twenty faculties who were deliberately-selected in order to receive feedback on clarity and accuracy of the survey items. The survey was later formatted in the reliable survey administration software Google Form. **Table 1** displays the 28 questions included in the survey. The 28 Likert scale questions focused on 3 different factors: students, instructor, and institution. Fifteen questions pertained to the student subscale, seven to the instructor subscale and four to the institution subscale. The student subscale measures the lecturer perceived students' satisfaction with distance learning. The instructor subscale intends to measure the lecturer satisfaction with promoting positive students' outcomes, self-gratification and interest in using technology, while the institution subscale measures the support provided by the institution for the lecturer to fulfill his/her needs in

TABLE 1 | The items of the study survey questionnaire.

Total questions

1. The level of my interactions with students in the online course is higher than in a traditional face-to-face class
2. The flexibility provided by the online environment is important to me
3. My online students are actively involved in their learning
4. I incorporate fewer resources when teaching an online course as compared to traditional teaching[a]
5. The technology I use for online teaching is reliable
6. I have a higher workload when teaching an online course as compared to the traditional one[a]
7. I miss face-to-face contact with students when teaching online[a]
8. I do not have any problems controlling my students in the online environment
9. I look forward to teaching my next online course
10. My students are very active in communicating with me regarding online course matters
11. I appreciate that I can access my online course any time at my convenience
12. My online students are more enthusiastic about their learning than their traditional counterparts
13. I have to be more creative in terms of the resources used for the online course
14. Online teaching is often frustrating because of technical problems.[a]
15. It takes me longer to prepare for an online course on a weekly basis than for a face-to face course[a]
16. I am satisfied with the use of communication tools in the online environment (e.g., chat rooms, threaded discussions, etc.)
17. I am able to provide better feedback to my online students on their performance in the course
18. I am more satisfied with teaching online as compared to other delivery methods
19. My online students are somewhat passive when it comes to contacting the instructor regarding course related matters[a]
20. It is valuable to me that my students can access my online course from any place in the world
21. The participation level of my students in the class discussions in the online setting is lower than in the traditional one[a]
22. My students use a wider range of resources in the online setting than in the traditional one
23. Technical problems do not discourage me from teaching online
24. I receive fair compensation for online teaching
25. Not meeting my online students face-to-face prevents me from knowing them as well as my on-site students[a]
26. I am concerned about receiving lower course evaluations in the online course as compared to the traditional one[a]
27. Online teaching is gratifying because it provides me with an opportunity to reach students who otherwise would not be able to take courses
28. It is more difficult for me to motivate my students in the online environment than in the traditional setting[a]

[a]*Reverse coded items.*

distance education and the institution appreciation to the lecturer's efforts. Higher scores indicated higher satisfaction levels ranging from 1 indicating complete dissatisfaction to 5 indicating complete satisfaction.

Statistical Analysis

Statistical analysis was conducted using SPSS version 24. Continuous variables were expressed as means and standard deviations (SD), while categorical variables were expressed as frequencies and percentages. Explanatory factor analysis (EFA) was conducted to evaluate the best suitable structure for the study data. Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity confirmed the suitability of the data for EFA. Parallel Analysis (Eigenvalue Monte Carlo Simulation) was conducted, and scree plots were examined to determine the most appropriate number of factors to extract. Pattern matrix was generated using direct-oblimin and the correlation matrix was examined to identify the proper rotation method. Correlation matrix with correlation higher than 0.32 indicated the suitability for oblique rotation method (Tabachnick and Fidell, 2007). Internal consistency for each generated factor was evaluated by computing Cronbach's alpha. Acceptable Cronbach's alpha is known to be above 0.7, however, for subscales with limited item numbers, Cronbach's alpha above 0.5 is sufficient (Tabachnick and Fidell, 2007). Confirmatory factor analysis (CFA) was applied using maximum likelihood (ML) approach on the suggested final model and goodness of fit was evaluated by calculating CMIN/

DF (minimum discrepancy), CFI (comparative fit index), GFI (goodness of fit index) Adjusted goodness-of-fit (AGFI) and RMSEA (Root Mean Square Error of Approximation). Acceptable values for CMIN/DF are 2–5, for RMSEA less than 0.8 and for AGFI, GFI, and CFI values closer to 1. Cronbach's alpha was computed to evaluate internal consistency of each generated factor (Schumacker, 2004). Several Kruskal–Wallis and Mann-Whitney U test were applied to evaluate association between different variables and faculty member's degree of satisfaction with distance learning. Freidman's 2-way ANOVA with pair wise comparison was conducted to evaluate the significant differences between the three computed factor scores.

RESULTS

Demographic characterestics of the study participants are presented in **Table 2**. EFA was conducted to evaluate the most suitable model for study data. Low communalities were produced in items 7, 13, 19, 20, 24, 25, and 28. Therefore, all these items were excluded from the analysis. The EFA was rerun after excluding these items and the scree plots suggested 3 factors (**Figure 1**). The 3-factor model was reconfirmed when conducting parallel analysis. Direct-oblimin rotation method was used as the highest correlation between the factors exceeded the cut-off point of 0.32 (highest correlation was 0.0.38 between the technology and student

FIGURE 1 | Scree Plot.
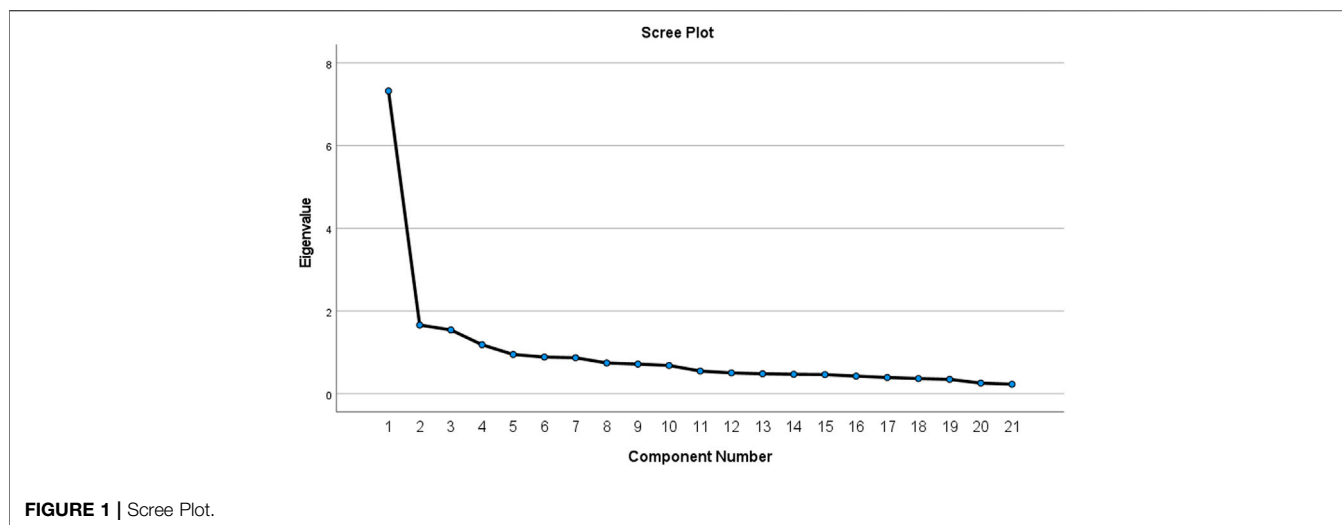
TABLE 2 | Demographics of the study participants.

		Frequency (Percent)	Mean (SD)
Gender	Female	108 (37.8)	—
	Male	178 (62.2)	
Degree of Study	BSc	9 (3.1)	—
	PhD	225(78.7)	
	MSc	52 (18.2)	
Academic Position	Professor	40 (14)	—
	Associate Professor	83 (29)	
	Teaching Assistant	103 (36)	
	Teacher	10 (3.5)	
		50 (17.5)	
Employment Status	Part Time	12 (4.2)	—
	Full Time	274 (95.8)	
Specialty	Medical	122 (42.7)	—
	Social Sciences	107 (37.4)	
	Engineering, IT, Science	57 (19.9)	
Field of Education	Scientific	226 (79)	—
	Non-Scientific	60 (21)	
University type	Public	192 (67.1)	—
	Private	94 (32.9)	
Have you operated online teaching before the COVID-19 pandemic?	No	168 (58.7)	—
	Yes	118 (41.3)	
Have you received training for online teaching?	No	143 (50)	—
	Yes	143 (50)	
Have you attended any courses as a trainee through the internet?	No	123 (43)	—
	Yes	163 (57)	
Age	—	—	44.3 (9.652)
Number of years of online teaching	—	—	3.49 (3.302)
Number of years of teaching experience	—	—	11.31 (8.037)

factors indicating good discriminant validity). KMO value of 0.90 supported the adequacy of the sample and the significance of Bartlett's test of sphericity ($\chi^2 = 2363.72$; $p < 0.001$) validated the EFA results.

Factor names, statements, factor loadings, communalities and Cronbach's alpha for the three-factor mode are shown in **Table 3**. The first factor included 12 statements which measured the student related satisfaction. For this factor, the communalities ranged between 0.32 (for item 21) and 0.68 (for item 9), and the factor loadings vary between 0.47 (for item 8) and 0.82 (for item 12). Cronbach's alpha for this factor was 0.90, and it would not be higher if any item was deleted. For factor 2, named institution related satisfaction, the factor loading ranged between 0.51–0.82 and communalities ranged between 0.34 and 0.68, with Cronbach's alpha of 0.55. The loadings in technology related satisfaction (Factor 3) ranged between 0.51 and 0.65 and the

TABLE 3 | Factor names, statements, factor loadings, communalities, and Cronbach's alpha for the three-factor mode.

Factor's name	Question number	Communalities	Factor loading	Cronbach's alpha	Cronbach's alpha if item deleted	Corrected item-total correlation
Students	1. The level of my interactions with students in the online course is higher than in a traditional face-to-face class	0.47	0.67	0.90	0.89	0.62
	2. The flexibility provided by the online environment is important to me	0.48	0.61		0.89	0.62
	3. My online students are actively involved in their learning	0.55	0.76		0.89	0.65
	8. I do not have any problems controlling my students in the online environment	0.37	0.47		0.90	0.52
	9. I look forward to teaching my next online course	0.68	0.60		0.89	0.73
	10. My students are very active in communicating with me regarding online course matters	0.54	0.54		0.89	0.62
	12. My online students are more enthusiastic about their learning than their traditional counterparts	0.61	0.82		0.89	0.68
	18. I am more satisfied with teaching online as compared to other delivery methods	0.61	0.73		0.89	0.70
	22. My students use a wider range of resources in the online setting than in the traditional one	0.50	0.71		0.89	0.63
	17. I am able to provide better feedback to my online students on their performance in the course	0.47	0.67		0.89	0.59
	27. Online teaching is gratifying because it provides me with an opportunity to reach students who otherwise would not be able to take courses	0.60	0.66		0.89	0.72
	21. The participation level of my students in the class discussions in the online setting is lower than in the traditional one	0.32	0.61		0.90	0.41
Institution	15. It takes me longer to prepare for an online course on a weekly basis than for a face-to face course	0.68	0.82	0.55	0.53	0.27
	6. I have a higher workload when teaching an online course as compared to the traditional one	0.50	0.70		0.16	0.50
	26. I am concerned about receiving lower course evaluations in the online course as compared to the traditional one	0.34	0.51		0.55	0.27
Technology	5. The technology I use for online teaching is reliable	0.49	0.65	0.73	0.69	0.46
	14. Online teaching is often frustrating because of technical problems	0.48	0.63		0.68	0.48
	16. I am satisfied with the use of communication tools in the online environment (e.g., chat rooms, threaded discussions, etc.).	0.57	0.59		0.65	0.59
	4. I incorporate fewer resources when teaching an online course as compared to traditional teaching	0.34	0.58		0.73	0.30
	23. Technical problems do not discourage me from teaching online	0.45	0.55		0.68	0.50
	11. I appreciate that I can access my online course any time at my convenience	0.50	0.51		0.68	0.49

communalities were between 0.34 and 0.57, and the Cronbach's alpha was 0.73.

CFA was conducted on the 3-factor solution (21 items) to confirm the model fitness The model with four error covariance between items in the same factors yielded acceptable model fit indicators (CMIN/DF = 2.30, CFI = 0.89, GFI = 0.88, AGFI = 0.85, and RMSEA = 0.07).

Table 4 displays the median for the satisfaction level of the sample subgroups with distance learning with regard to students, institution, and technology. Kolmogorov-Smirnov test indicated that students, institution, and technology scores were not normally distributed; therefore Mann-Whitney and

Kruskal–Wallis tests were used. The study results showed that participants with Bachelor's degree reported significantly lower satisfaction (scores) with online teaching regarding technology score when compared with Master ($p = 0.015$) or PhD degree ($p = 0.026$). With regard to the specialty field, participants who worked in medical field were more dissatisfied with technologies used in online teaching than those in engineering or IT field ($p = 0.033$). Nevertheless, participants working in social sciences scored the lowest institution scores than both medical field ($p < 0.0001$) and engineering or IT science ($p = 0.01$). Higher institution scores were identified by participants working in scientific educational fields than those who work in

TABLE 4 | Questionnaire subgroup satisfaction scores.

Variable		Median (25–75 quartiles)		
		Students	**Institution**	**Technology**
Gender	Female	2.63 (2.17–3.15)	2.0 (1.33–2.33)	3.33 (3.0–3.79)
	Male	2.67 (2.0–3.25)	2.0 (1.67–2.33)	3.33 (2.83–3.67)
Degree of Study	BSc	2.67 (1.75–2.96)	2.0 (1.50–2.67)	3.0 (2.67–3.17)[a]
	PhD	2.67 (2.08–3.25)	2.0 (1.50–2.33)	3.33 (2.83–3.67)
	MSc	2.75 (2.25–3.14)	2.0 (1.67–2.33)	3.42 (3.0–3.83)
Academic Position	Professor	2.75 (2.10–3.25)	2.0 (1.67–2.33)	3.58 (3.0–3.83)
	Associate Professor	2.67 (2.0–3.17)	2.0 (1.33–2.33)	3.33 (2.83–3.67)
	Assistant Professor	2.58 (2.08–3.33)	2.0 (1.67–2.33)	3.33 (3.0–3.67)
	Teaching Assistant	2.71 (2.17–3.04)	2.0 (1.92–2.67)	3.17 (2.92–3.33)
	Teacher	2.71 (2.25–3.08)	2.0 (1.33–2.33)	3.33 (2.96–3.83)
Employment Status	Part Time	2.79 (1.83–3.35)	2.17 (1.75–2.58)	3.17 (2.63–3.83)
	Full Time	2.67 (2.08–3.17)	2.0 (1.58–2.33)	3.33 (2.83–3.67)
Specialty	Medical	2.58 (2.08–3.17)	2.33 (1.67–2.67)	3.33 (2.96–3.67)[a]
	Social Sciences	2.67 (2.0–3.17)	1.67 (1.33–2.0)[a]	3.33 (2.83–3.67)
	Engineering, IT, Science	2.92 (2.21–3.38)	2.0 (1.67–2.33)	3.50 (3.0–3.83)
Field of Education	Scientific	2.63 (2.08–3.25)	2.0 (1.67–2.33)[a]	3.33 (3.0–3.67)
	Non-Scientific	2.67 (2.17–3.08)	1.67 (1.33–2.0)	3.33 (2.83–3.67)
University type	Public	2.71 (2.17–3.04)	2.0 (1.92–2.67)	3.17 (2.92–3.33)
	Private	2.71 (2.25–3.08)	2.0 (1.33–2.33)	3.33 (2.96–3.83)
Have you operated online teaching before the COVID-19 pandemic?	No	2.58 (2.02–3.08)[a]	2.0 (1.33–2.33)	3.33 (2.83–3.67)
	Yes	2.83 (2.17–3.42)	2.0 (1.67–2.33)	3.33 (3.0–3.83)
Have you received training for online teaching?[a]	No	2.50 (2.0–3.0)	2.0 (1.67–2.67)	3.17 (2.83–3.67)
	Yes	2.83 (2.25–3.33)	2.0 (1.33–2.33)	3.33 (3.0–3.83)
Have you attended any courses as a trainee through the internet?[a]	No	2.41 (1.83–2.92)	2.0 (1.67–2.33)	3.17 (2.67–3.67)
	Yes	2.92 (2.25–3.33)	2.0 (1.33–2.33)	3.50 (3.0–3.83)

[a]p value < 0.05.

non-scientific fields ($p = 0.005$). Moreover, results revealed that those who received training for online teaching and those who have attended courses as a trainee were more significantly satisfied when compared with those who did not receive training nor attended courses in all aspects ($p < 0.05$). Furthermore, participants who operated online teaching before the COVID-19 pandemic were significantly more satisfied with online teaching with respect to students score than those who didn't ($p = 0.025$).

Freidman's 2-way ANOVA with pair wise comparison indicated that there was a significant difference between the three factors scores ($p < 0.001$). The highest score was for technology (median = 3.33), followed by students (median = 2.66), while the lowest was for institution (median = 2.00).

DISCUSSION

The most recently discovered coronavirus, known as COVID-19, was declared a global pandemic by the World Health Organization (WHO), which began in Wuhan China in December of 2019 (WHO, 2021). Presently, there has been an outbreak in most countries worldwide, including Jordan, with this respiratory infectious disease, imposing country lockdowns that include travel restrictions, quarantines, and institutional closures (Viner et al., 2020). With the closings of institutions, the Ministry of Education in Jordan has obligated universities to rely on online resources to activate distance learning. Distance learning has progressively become a fundamental part of

education with the rise of the COVID-19 pandemic, not only in Jordan, but globally (World Economic Forum, 2020). Furthermore, with the rise in adoption of this type of learning medium, COVID-19 has imposed distance learning and affected both students and faculty members equally. Faculty members are required to discover new techniques in order to prepare, organize, deliver, and assess courses and learning materials for online teaching, as it is argued that the online teaching values are different from that in a traditional classroom setting (O'Malley, 2017; Martin et al., 2019). Therefore, it is of utter importance to emphasize the mounting imposition of distance learning precisely on faculty members. Limited data is available in the literature to provide insight on the impact of distance education on Faculties. The current study is the first one that enlightens what the impact of the COVID-19 global crisis has had on distance learning in the eyes of faculty members in Jordan.

A previously validated questionnaire (Bolliger and Wasilik, 2009) that included 28 Likert scale items were used to collected faculty members' satisfaction degree with distance learning. As stated previously, the original 28 core questions focused on 3 different factors: students, instructor, and institution. Fifteen questions pertained to the student subscale, 7 to the instructor subscale, and 4 to the institution subscale. However, factor analysis suggested different structure for the present study data. The final model produced by the EFA is composed of 21 items distributed in three factors. These factors are: Students, institution, and Technology. The CFA confirmed the suitability of the 3-factor model as indicated by CMIN/DF, GFI, AGFI, CFI and RMSEA. The final version explaining 50.1% of variance and

had acceptable discriminant validity, and internal consistency. The present model which contains three factors is similar to the number of factors produced by the original study. Nevertheless, the factors were constructed from different items. These differences could be attributed to differences in the studies' methodology, but more significantly to cultural differences. The student subscale measured the lecturer perception towards student satisfaction with distance education, the technology subscale measured the faculty members familiarity with, and interest in using different educational and communication platforms. The institution factor measures the lecturer satisfaction with his/her workload and compensations provided by the institution for his/her work.

According to the survey data collection, the instructors in the present study were generally unsatisfied with their experience in regards to distance teaching (median = 2.67), despite the few advantages posed towards distance learning, including reaching a broader target, allowing both instructors and students to teach and attain education at suitable times flexible to fit their busy schedules, empowering students to build a learning atmosphere in an environment opposite to that of the traditional classroom; and additionally, providing a cost-effective method of education (Totaro et al., 2005; Perrin et al., 2015). Although the same matter was being taught by instructors in the web-based environment as in the traditional classrooms, descriptive statistics indicate that instructors believed that their students were not actively involved in their virtual courses, nor were they enthusiastic towards online education as indicated by the student subscale (student score = 2.67). The results of this study reports low satisfaction level with distance learning mimics the results of a study that was conducted in Saudi Arabia (Perrin et al., 2015).

A previous study concluded that instructors teaching online were on the borderline of burnout, with high scores of emotional exhaustion and depersonalization yielding an overall low satisfaction level concerning distance learning (Hogan and McKnight, 2007). Nevertheless, previous studies reported a positive impact of online learning on students' education as well as higher satisfactory levels of instructors with their online experiences (Scheuer et al., 2000; Bolliger and Wasilik, 2009; Simonson et al., 2011; Gossenheimer et al., 2017).

The least satisfaction score in the present study was reported in the institution-related domain which evaluated the workload and adequate compensation, the result of the current study mimics previously reported results where the faculties perceived workload to be higher and more time consuming when compared with the traditional learning (Simonson et al., 2008; Kellen, 2020).

The current study results revealed that faculties who received training about online teaching and those who attended courses as a trainee through the internet were more significantly satisfied with distance learning when compared to those who neither received training nor attended online courses. Training allows instructors to feel more confident and hopeful of the new possibilities for teaching and learning while the lack of training is actually one of the greatest barriers between faculties and distance learning (Lee and Busch, 2005; Abuhammad, 2020; Clay, 2020). Therefore, implementing training for online teaching could increase faculties' satisfaction with distance learning.

Strengths and Weaknesses of the Study

The current study recruited faculties with medical and non-medical specialties from public and private universities from all geographical areas in Jordan, which enhance the generalizability of the study findings. The Online methodology can provide a safe and private environment that allows the participants to provide more accurate and honest answers. The study survey was translated to Arabic language, the native language of the study participants, which enhances better understanding of the survey questions and lead to more accurate responses. The study findings should provide insight for future strategic planning which aim at improving faculties' satisfaction and hence distance education quality and outcomes.

The cross-sectional design of data collection does not allow the tracking of changes in the perception of faculties over time. Also, using the self-report method could make the obtained information prone to social desirability and selection biases.

CONCLUSION

The faculty's low satisfaction levels with distance learning reported in the present study should open the doors for improvement by conducting intensive online training courses, which will enable the faculties to implement distance education appropriately in the near future. Findings of the present study should be considered in future strategic planning by the educational authorities with the aim of improving faculties satisfaction and hence distance education quality and outcomes. The current study has also validated an Arabic version of an instrument which could be used to evaluate satisfaction with distance education in future studies.

Future Work

The current study evaluated the faculties' satisfaction with the benefits perceived by their students during distance education. Future work is needed to compare the achieved learning outcomes by the two different learning styles face to face and distance education. Also, Future research which evaluates the impact of training program on faculties satisfaction with distance education is deemed necessary. The research should evaluate the faculties satisfaction before and after the implementation of the training program in order to help filling the gaps.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusion of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Institutional Review Board at Jordan University of Science and Technology. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

AUTHOR CONTRIBUTIONS

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