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Distance Learning Challenges that Faced Faculty Members in Saudi Universities During the Covid-19 Pandemic

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Abstract

Education has changed significantly and rapidly reflecting the distinctive rise in the use e-learning during the Covid-19 pandemic, which forced the educational institutions in Saudi Arabia to transfer the learning model from a traditional one to distance learning. The switch from traditional learning to distance learning has brought various challenges for instructors of Saudi universities which not only affected the utilization of technology in education but also the pedagogical strategies and teaching styles of the future. This paper explores some of the challenges of using distance learning experienced by Saudi universities instructors. The distance learning challenges have been measured on five-point Likert scales, ranging from 'Strongly Agree' to 'Strongly disagree'. Mean Scores (M) greater than four ($M > 4$) reflect disagreement, a score of less than three ($M < 3$) represents an agreement, and a score equal to three ($M = 3$) represents a neutral opinion towards the distance learning challenges that face the Saudi

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universities instructors. The total participants were 138 (n=138) from different fields and genders, 61.6% were satisfied using distance learning, but there were five noted important challenges facing most instructors which are (a) technical support (M=2.05); (b) difficulty accepting the sudden shift in teaching online due to the pandemic COVID-19 (M=2.52); (c) the difficulty for students of accepting distance learning during this time (M=2.74); (d) the poor quality of the training courses (M=2.92), and (e) the lack of ongoing training courses (M=2.98).

***Keywords*:** distance learning, online courses, professional development, Covid-19, online teaching challenges, training online courses

تحديات التعلم عن بعد التي واجهها أعضاء هيئة التدريس في الجامعات السعودية خلال جائحة كوفيد –19

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المستخلص:

لقد تغير التعليم بشكل كبير وسريع مما يعكس الارتفاع المميز في استخدام التعلم الإلكتروني خلال جائحة كوفيد -19 ، مما أجبر المؤسسات التعليمية في المملكة العربية السعودية على نقل نموذج التعلم من النموذج التقليدي إلى التعلم عن بعد. جلب هذا التحول من التعلم التقليدي إلى التعلم عن بعد تحديات مختلفة لأعضاء هئية تدريس الجامعات السعودية والتي لم تؤثر فقط على استخدام التكنولوجيا في التعليم ولكن أيضًا على الاستراتيجيات التربوية وأساليب التدريس في المستقبل. يوضح هذا البحث بعض تحديات استخدام التعلم عن بعد التي واجهها أساتذة الجامعات السعودية. تم قياس تحديات التعلم عن بعد على مقاييس ليكرت المكونة من خمس نقاط ، والتي تتراوح من "أوافق بشدة" إلى "أعارض بشدة". متوسط الدرجات (M) أكبر من أربعة (M> 4) يعكس الخلاف ، وتمثل الدرجة الأقل من ثلاثة (M <3) اتفاقًا ، والنتيجة التي تساوي ثلاثة (M = 3) تمثل رأيًا محايدًا تجاه التعلم عن بعد والتحديات التي تواجه أساتذة الجامعات السعودية. كان إجمالي المشاركين 138 (ن = 138) من

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مختلف المجالات والأجناس ، و 61.6٪ راضون عن استخدام التعلم عن بعد ، ولكن كانت هناك خمسة تحديات مهمة ملحوظة تواجه معظم الاساتذة وهي (أ) الدعم الفني (M = 2.05) ؛ (ب) صعوبة قبول التحول المفاجئ في التدريس عبر الإنترنت بسبب الجائحة (M = 2.52) ؛ (ج) صعوبة قبول الطلاب للتعلم عن بعد خلال هذا الوقت (M = 2.74) ؛ (د) رداءة نوعية الدورات التدريبية (M = 2.92) ، (هـ) عدم وجود دورات تدريبية مستمرة (M = 2.98).

الكلمات المفتاحية: التعلم عن بعد, الفصول الدراسية عن بعد,الدورات التدريبية عن بعد, التطوير المهني, تحديات التدريس عن بعد, جائحة كوفيد -19

Introduction

Distance learning has improved over the years and more institutions of higher education are adopting this method more readily than ever before (Allen & Seaman, 2011; Lowenthal & Wilson, 2010; Volery & Lord, 2000). Furthermore, some of the higher educational institutions are trying to perform and apply modern methods of teaching to the educational system and are using technological tools to improve learning, but these methods vary from one person to another. All teachers have their own styles; some of them focus only on the literature face to face in the classroom while others focus on creative teaching using technology. Although all teaching styles support one specific goal, which is the completion of the educational process, there are significant similarities, challenges, and differences that exist between those who believe in traditional teaching and those who believe in changing and evolving with educational technology.

Transitioning teaching from the traditional method to distance learning has become the norm in all higher education institutions these days due to the impact of the COVID-19 pandemic which sent the whole world into lockdown. Besides that, the forced implementation of distance learning in all Saudi educational institutions was seen as the best way to prevent infections during the pandemic. However, teachers have faced diverse challenges using distance learning. The purpose of this study is to identify the challenges faced by Saudi university

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instructors to provide insight into ways in which distance learning can be improved and to answer the research question (What are the most challenges of using distance learning among Saudi university instructors during the Covid-19 pandemic?).

Research Problem:

Moving the teaching methods from the traditional one to apply distance learning in all higher education institutions these days because of the hard situation of the COVID-19 pandemic disease which keeps the whole world in lockdown which affected the world more negatively than positively. Besides that, the forcing of using distance learning in all Saudi educational institutions is the best way to protect us from this pandemic. However, some teachers have challenges using distance learning differently. So, through this study, identified the challenges among Saudi university instructors is important to ease improving distance learning.

Research Question:

What are the most challenges of using distance learning among Saudi universities instructors during the Covid-19 pandemic?

Definitions Terms:

To create a better understanding for the reader, the study terms definition may help clarify some terms in the study. Therefore, the following is a list of terms defined as to their use in this study:

- Distance Learning: is a type of education used to deliver class information to the students through technological tools synchronously or asynchronously, while students and instructors are a distance from each other in time or space (Seaman, Allen, & Seaman, 2018).
- Covid-19: It is a virus that emerged in December 2019 which is an infectious disease caused by a newly discovered coronavirus. Also, it called the coronavirus disease 2019

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that has spread rapidly, with cases now confirmed in multiple countries (Gao, J., Tian, Z., & Yang, X. 2020).

- Synchronous: Synchronous is a way of communication occurs at the same time with using technology or without it (Spector, M. J., Merrill, M. D., van Merrienboer, J., & Driscoll, M. P., 2008).
- Asynchronous: Asynchronous is a way of communication occurs not at the same time by using technology (Klein et al., 2004, p.129).

Literature Review and Related Work:

Distance learning is a relatively new means of delivering education which began in the 1990s-2000s as the world became advanced in computer technology, especially multimedia that enabled constructivist educators to design a more learner-centered educational experience and improve the education as well as school systems (Reiser, 2002). There are different types of distance courses and programs used in the educational institutions and universities, fully delivered via distance and which require the courses to be completed through distance education (Seaman et al., 2018). The study of Allen and Seaman (2011) indicated that more than 60 % of universities were using distance learning in 2010 and more than 6.1 million higher education students were enrolled in distance courses. This number is an indication that using distance learning is effective in improving learning. In addition, more universities are offering online courses synchronously and asynchronously (Allen & Seaman, 2011). Despite the positive things about using distance learning, whether it is synchronous or asynchronous, there are a lot of challenges facing teachers who use distance learning.

According to the National Center for Educational Statistics 1997 40% of distance learning programs do not provide any technical training to faculty prior to their teaching online courses. This lacks training in technology leads to insufficient online instruction and content which in turn affect the quality and continuity of distance learning (Johnsrud, Harad, & Tabata, 2006; Folkers, 2005; McGee-Swope, K., 2010). Distance learning involves more work and effort to achieve successful learning goals. There are additional challenges in getting the university

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instructors to accept online delivery methods and the type of teaching style required for students to be successful online environment (Allen & Seaman, 2007). Technology is constantly changing which makes educational institutions faced with an ongoing challenge of training faculty and instructors so they can be effective in developing and teaching in a distance learning environment (Akram, Ather, Tousif, & Rasul, 2012; Kukulska-Hulme, 2012). Furthermore, several studies have revealedthat ongoing training, especially in the distance learning field are high cost as they require educational technology tools effective trainers, development of effective technology based content, and suitable places where learning institutions can collaborate to gain effective learning skills and improve this type of learning (Morgan, 2003; Hardy & Bower, 2004; Kidwell, Mattie, & Sousa, 2000; Moore & Kearsley, 2005; Lee, 2002; Allen & Seaman, 2011).

Furthermore, Lee (2001) examined faculty satisfaction with the instructional support system for distance education. The study used a Web-based survey designed for study participants. Results found that the majority of the 237 faculty members from 25 institutions reported low levels of satisfaction with the instructional support. In addition, the participants reported a lack of motivation and commitment to distance education as well as lack of sufficient preparation of the instructors in the use of distance learning tools (Lee, J. ,2001).

Additionally, Allen and Seaman (2007) examined the instructors' perceptions of using distance learning and of using traditional learning; results show that 44% of instructors have negative perceptions of online learning while only 3.7% of instructors find that online and face to face (F2F) instructional methods are comparable. However, some instructors prefer teaching online to face-to-face teaching due to the flexibility of working from anywhere.

In another study, Alexander, M., Perreault, H., Waldman, L., & Zhao, J. (2002) examined the perceptions of eighty-one online business professors designing and developing online courses for distance learning environments at various institutions in. Results showed that, 87% of the respondents reported dissatisfaction with the lack of collaboration in the development of the learning contents as well as technical issues and time management.

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There were a limited number of studies conducted on the impact of distance learning on education and on the challenges of using technology for distance learning. However, during the Covid-19 pandemic, a lot of studies were performed. Al Darayseh (2020) conducted a qualitative study to investigate the impact of Covid -19 on teaching science in UAE schools. The findings of this study showed that the Covid- 19 pandemic affected science education negatively so the teaching methods and the teachers' digital qualifications should be improved.

Al-Balas et al. (2020) conducted a study in Jordan to investigate the impact of distance learning on clinical medical education during the COVID-19 pandemic. The study used a survey instrument on a sample consisting of (652) medical students in their clinical years. The results showed that was a higher level of satisfaction with using distance learning.

Other studies explored major obstacles and challenges faced during the Covid -19 pandemic on the distance learning experience. Most of these challenges are related to the sudden shift from traditional teaching to a technology based one in a short time period. This was particularly the case for faculty who were not conversant with the new technologies. Furthermore, becoming familiar with new technologies presented a challenge for some faculty and students. For instance, technical support, internet access, and the correct knowledge for using the distance learning method were the major problems (Altawalbeh, K. & Al-Ajlouni, A. (2022); Carter et al., 2021; Niemi & Kousa, 2020; Rahman & Buck, 2021; Serhan, 2021).

Method:

- Research Design

Quantitative research is widely used in educational research, and the use of a survey instrument in the form of a questionnaire is one of the most successful means of data collection used in quantitative methods (Henson, Hull, & Williams, 2010). Survey questionnaires are commonly accepted as effective in nonexperimental quantitative research in higher education (Cook & Cook, 2008). Furthermore, an online survey offers several advantages over traditional hard copy surveys such as low cost, flexibility, and quick response time (Lefever, Dal, &

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Matthíasdóttir, 2007; Wright, 2005).

- The Instrument and Data Collection

An online survey was conducted to collect the data for this study. The survey method was designed based on the existing literature (Morgan, 2003; Hardy & Bower, 2004; Kidwell, Mattie, & Sousa, 2000; Moore & Kearsley, 2005; Lee, 2002; Allen, I.E., & Seaman, J., 2007; Alexander, M., Perreault, H., Waldman, L., & Zhao, J., 2002) as well as some suggestions from experts during the development of the survey questions to identify the possible challenges.The survey questions consisted of fourteen (14) items which include demographic information and identify the various challenges in the implementation of distance learning. Based on the nature of the survey questions in this study, a 5-point Likert scale was chosen. The Likert scale ranging from 'Strongly Agree' (1) to 'Strongly Disagree' (5) was developed to measure the challenges of distance learning with universities instructors. The average time to complete the survey was approximately four minutes. The survey link was sent to 250 individuals from different Universities in Saudi Arabia through the WhatsApp application.The demographic profiles of the participants were based on 2 aspects, which are gender and fields. Also, there was a question about the satisfaction with using distance learning. The total number of responses received was 138 (n=138). Of the 138 respondents 71 (51.4 %) were males, 67 (48.6 %) were females (See Table 1).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	71	51.4	51.4	51.4
	female	67	48.6	48.6	100.0
	Total	138	100.0	100.0	

Table 1: Gender

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The participants in this study were from different fields such as computer science, education, engineering, medicine, business…etc. as show in (Table 2).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	computer science	29	21.0	21.0	21.0
	education	8	5.8	5.8	26.8
	engineering	10	7.2	7.2	34.1
	law	2	1.4	1.4	35.5
	science	32	23.2	23.2	58.7
	arts	10	7.2	7.2	65.9
	sociology	23	16.7	16.7	82.6
	medicine	6	4.3	4.3	87.0
	linguistic	8	5.8	5.8	92.8
	business	3	2.2	2.2	94.9
	nursing	7	5.1	5.1	100.0
	Total	138	100.0	100.0	

Table 2: Participants Fields

The responds “yes” were the highest percentage of the satisfaction of using distance learning of the participants as shown in (Table 3).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	85	61.6	61.6	61.6
	no	13	9.4	9.4	71.0
	maybe	40	29.0	29.0	100.0
	Total	138	100.0	100.0	

Table 3: satisfaction of using distance learning.

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- Data Analysis

Once the data collection stage was completed, the survey questions were imported from the Google Forms website into an MS Excel data spreadsheet then imported to the SPSS data analysis software for analysis. The data analysis procedures were guided by the survey questions of the study.

- Validity and Reliability

The survey questions were reviewed for content validity by experts who specialize in diverse fields of education such as educational technology, evaluation and measurement, and instructional design. For the survey reliability, a pilot study was conducted which used Cronbach's Alpha to ensure the reliability of the survey instrument for this study. Reliability was confirmed as shown in (Table 4).

Cronbach's Alpha	N of Items
.702	14

Table 4: Reliability Statistics

Findings:

Results related to satisfaction with using distance learning show that 61.6% of the participants' answers were 'yes' while 29% of the participants answered 'maybe' as shown in (Table 3). This result indicated that there is a wide acceptance of using distance learning. However, other questions revealed that there were some challenges faced. Table 5 shows a descriptive statistic for the distance learning challenges explained in detail, the greatest distance learning challenges that faced the instructors during the Covid-19 pandemic. Each of the distance learning challenges has been measured on five-point Likert scales, ranging from 'Strongly Agree' to 'Strongly disagree'. Mean Scores (M) greater than four (M > 4) reflect disagreement, a

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score of less than three (M < 3) represents an agreement, and a score equal to three (M = 3) represents a neutral opinion towards the specific distance learning challenge.

Distance learning challenges	Strongly agree	agree	Neutral	disagree	Strongly disagree	Mean
technical support	35.5% N=49	39.1% N=54	11.6% N=16	12.3% N=17	1.4% N=2	2.05
lack of ongoing training courses	13.8% N=19	24.6% N=34	18.8% N=26	35.5% N=49	7.2% N=10	2.98
difficulty of time management	10.1% N=14	25.4% N=35`	8.7% N=12	46.4% N=64	9.4% N=13	3.20
unwillingness to use distance learning and a preference for traditional education	14.5% N=20	26.8% N=37	15.2% N=21	23.9% N=33	19.6% N=27	3.07
the poor quality of the training courses	16.7% N=23	26.1% N=36	17.4% N=24	28.3% N=39	11.6% N=16	2.92
difficulty of accepting distance learning for students during this time	15.2% N=21	34.8% N=48	15.2% N=21	30.4% N=42	4.3% N=6	2.74
difficulty accepting the sudden shift in teaching online due to the pandemic covid-19	17.4% N=24	44.9% N=62	10.9% N=15	21.7% N=30	5.1% N=7	2.52
difficulty of designing traditional educational content into E-content	8.0% N=11	33.3% N=46	15.9% N=22	31.2% N=43	11.6% N=16	3.05
the large number of students in virtual classes	7.2% N=10	21.0% N=29	26.1% N=36	31.9% N=44	13.8% N=19	3.24
inability to control virtual classes	7.2% N=10	25.4% N=35	18.8% N=26	38.4% N=53	10.1% N=14	3.19

Table 5: descriptive statistic for the distance learning challenges

As shown in Table 5, the findings from the respondents (n = 138) reveal that the M score of all the challenges was equally between the agreement level and the neutral level, thus indicating the significance of all the listed challenges. Five out of ten challenges showed a mean

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score of less than 3 (M > 3). This indicates that these are the strongest challenges faced by the Saudi universities' instructors, which prevents them from accepting and improving distance learning. The five most important challenges were (a) technical support (M=2.05); (b) difficulty accepting the sudden shift to teaching online due to the pandemic COVID-19 (M=2.52); (c) the difficulty of accepting distance learning by students during this time (M=2.74); (d) the poor quality of the training courses (M=2.92), and (e) the lack of ongoing training courses (M=2.98).

Discussion and Recommendations:

The important challenges emerging from these findings are the technical support, difficulty of accepting the changes with the students or instructors, as well as the training courses and its quality. Therefore, the social meliorism curriculum theory focuses on the changing of the existing society (Kliebard, 1985). Consequently, society (students, instructors, workers, and trainers) need to be changed their plans and implement ways in which to change it towards a modern and evolving trend. Even though, recent developments in the field of education have led to a renewed interest in the use of distance learning but also tend to rethink building and growing the educational curriculum and program as well as training courses and the way to improve it through finding the challenges and solving them technologically. However, some studies showed that some students and instructors while using online courses tend to feel more unfocused and confused as well as isolated. Based on that, their learning satisfaction and learning progress will be affected (Zaborova & Markova, 2016; Ni, 2013). Because of that one of the important aspects of this research is to find the best way of resolving some of the learning issues that faced the instructors and students in using distance learning by knowing the challenges. In addition, applying distance learning must be advanced for improving the learning process by identifying the challenges and serious issues and finding solutions to them as well as focusing on the design the ongoing training technology to be better prepared for any unforeseen future issues. The Saudi universities that adopt face-to-face learning and were not in their plan to adopt distance learning, and with the sudden shift now require to keep practicing and developing for improving distance learning skills. So, Distance learning requires the presence of proven and approved

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infrastructure, phones, and software in education, and the purchase of university-specific programs to continue the fast development in education.

Conclusion:

Nowadays with the continuous and rapid changes that occur, that distance learning is vital to many areas not just those focused on education or business; it is a combination of unique performance, organizing, and development that leads to improving different functions and delivers a variety of knowledge which play. The importance of the use of distance learning has increased recently, especially after the Covid-19 pandemic, and it has become the first idea to shift from the traditional way of working in any field to the developmental technological thought.

In Conclusion, the study findings were consistent with previous studies (Morgan, 2003; Hardy & Bower, 2004; Kidwell, Mattie, & Sousa, 2000; Moore & Kearsley, 2005; Lee, 2002; Allen & Seaman, 2011; Altawalbeh, K. & Al-Ajlouni, A. (2022); Carter et al., 2021; Niemi & Kousa, 2020; Rahman & Buck, 2021; Serhan, 2021), which have reported that the insufficient of quality of training, technology skills, internet access and technical support issues, as well as the inflexible attitude to use distance learning as changing the traditional teaching style, are the common distance learning challenges among teachers influencing their use of technology in education and learning skills which can be effect the learning and teaching process too.

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