

**Psychosocial Impacts of Distance Education during COVID-19 on Female Social
Work Students and the Professional Role of the Social Worker**

الآثار النفسية والاجتماعية للتعليم عن بعد خلال COVID-19 على طالبات الخدمة
الاجتماعية والدور المهني للأخصائي الاجتماعي

د. نواف محمد العتيبي

أستاذ الخدمة الاجتماعية المشارك

كلية الخدمة الاجتماعية

جامعة الأميرة نورة بنت عبد الرحمن

Nouf M. Alotaibi, PhD

Associate Professor of Social Work

College of social work

Princess Nourah Bint Abdulrahman University

Psychosocial Impacts of Distance Education during COVID-19 on Female Social Work Students and the Professional Role of the Social Worker

Abstract

The present study explores the psychological, social, and economic impacts of distance education during COVID-19 on female students ofUniversity and the professional role of the social worker in handling these impacts. A questionnaire was developed to collect data. The sample includes 334 randomly selected female students (aged 19–24 and over) of the fifth and sixth levels of the College of Social Work. The results showed the effect of distance education on the social and psychological levels of students. There is also a statistically significant relationship between the professional role of the social worker and the psychological, social, and economic impact of distance education on female students. The results indicate that despite the impact of the Coronavirus pandemic on everyone, social workers have contributed to mitigating the negative psychological, social, and economic impacts of distance education during COVID-19 on female students as a unique experience of social workers in Saudi society. In addition to the need to prepare psychosocial support programs for students to facilitate the recovery process and return to normal life. This study's results indicate that students need psychosocial support in the current and recovery phases after Covid 19.

Keywords: Psychological impacts, Social impacts, Economic impacts, Distance education, COVID-19, Social worker.

Introduction

On March 11, 2020, the World Health Organization reported that the SARS-CoV-2 virus had been discovered in Wuhan, China, and referred to COVID-19 as a global pandemic (Huang et al., 2020). COVID-19 has imposed social distancing, curfews, and protective measures such as closing borders, schools, and universities, causing psychological, social, and economic problems. University students have suddenly experienced escalating global events that affect the world's economy, causing real fear of an extremely difficult future (Alfiqi & Ibrahim, 2020).

Since March 16, 2020, governments have closed schools and universities completely or partially, affecting millions of students worldwide (Addahshan, 2020); further, several universities have adopted successful alternatives such as online learning and distance learning. For instance, New York University Shanghai and Duke Kunshan University proved successful in employing several educational technology products, including video conference, Zoom, and Moodle, and becoming experienced in these techniques. While some educational institutions found it difficult to grasp the shift to online learning, others developed this form of learning owing to their solid knowledge of the tools, teaching methods, and relevant considerations. Hence, students who could not attend classes on campus became less confused (Czerniewicz, 2020).

Many countries, including Saudi Arabia, have adopted the techniques of digital transformation to improve quality, facilitate services, and continue to work remotely in some sectors, and education has not been spared such changes. Countries have employed a new pattern, i.e., distance education, because of its vital role in continuing education; in other words, educational institutions must maintain education via distance education, which has invaded spatial borders by studying online and temporal borders by overcoming the routine of attending places and crowding out others (Weeden & Cornwell, 2020). Higher education institutions have paid considerable interest to these changes and have embarked on developing the educational systems based on distance education services. In short, adopting distance education is essential to integrate technology into curricula and open up to broad horizons of educational and technological innovations (Alshahry, 2014).

Information and communication technology has affected education worldwide; however, transferring traditional classrooms to respond to COVID-19 requires thinking, coordination, and making accurate decisions. COVID-19 has made online

learning, blended learning, and distance education necessary across the world to collaborate on the aspirations and educational benefits of students who have become addicted to digital technology (Ali, 2020). Distance education is a new pattern of education in which a teacher, faculty member, or educational institution delivers remote learning in terms of space and/or time and provides an online educational environment with human requirements by the collaboration of many experts who perform a certain and planned task.

Higher education institutions adopt distance education when it is difficult for the student to attend on campus, including health conditions, wars, and so on. It relies largely on modern technology that people employ to get information, enrich ideas, discover knowledge, and make decisions for their scientific, academic, social, and economic lives (Almohamady, 2018; Alsaif, 2009). I adopt the definition of distance education of the Saudi Council of Higher Education (2011, p.170) as a pattern of education that uses electronic means and techniques of education and manages its interaction. Distance education is characterized by the separation between the teacher and the student, between the students themselves, or between the students and learning resources spatially or temporally. The Saudi Ministry of Education (2011, p.170) defines distance education as relocating an educational program to another educational institution to geographically dispersed places to attract students who could not continue education under normal circumstances.

The philosophy of distance education is that education is the right of all regardless of social, economic, and intellectual capabilities and conditions to achieve its democracy. It increases the number of individuals enrolled in university education, meets the lack of educational opportunities untraditionally, achieves the equality of education, and allows new opportunities of education for a wide range of learners. In this context, the student can learn using adequate methods anytime and anywhere, that is, distance education links several principles, such as learner-centered, self-learning, lifelong learning, and acknowledging a student's background (Almalahy, 2006; Working Group on Distance Education and Open Learning, 2001). The educational reality adopts the perspective that education relies on both the design of the educational content as well as using the educational content, shape, and position for the teacher and student (Awaj & Samia, 2016).

I argue that distance education is achieving all the advantages of traditional education. The increasing demand for distance education is a direct reason for its development as it could confront all social and economic challenges (An-Najm,

2019). Distance education takes various forms, namely synchronous and asynchronous. The former means that the teacher and the student interact with each other in “real time” with text, sound, video, chat, and so on, and the student receives direct feedback; the latter does not take place simultaneously via electronic devices using e-mails, educational forums, or platforms. The student does not receive feedback but consults the educational material at any time (Othman, 2010). In distance education, students get self-learning materials in different formats, such as printed or online audio and video materials. Thus, education is offered offline and/or online. Lately, distance education has become common as a kind of self-learning (Commonwealth of Learning, 2020).

Some Arab countries have taken an interest in distance education, opening private universities and allowing some universities to have deanships for it, its students, and their educational and administrative affairs. Amer (2007) and Assalih (2007) stressed the need for this form of education to educate people without the need to leave their places, to allow training and continuing education, and to resolve some issues of higher education. Moreover, Michael (2020) and Zain-elddin (2006) recommended that universities should form teams to consider establishing centers for distance education, design and deliver distance education courses, and employ distance education to resolve some educational issues. Saudi Arabia established the Center for E-learning and Distance Learning and the national plan for information technology, which recommends adopting e-learning and distance education in higher education. The plan also recommends providing financial, human, and technical support to develop university education with the aim to achieve international excellence in higher education and promote self-learning and lifelong learning (Center for E-learning and Distance Learning, 2019).

Saudi Arabia has applied and taken advantage of distance education through two streams. First, it established universities for distance education, such as the Saudi Electronic University in 2011 as a public institution based on information and communication technology and distance education, which grants degrees in programs and specializations compatible with the needs of the labor market, meet the requirements of development and lifelong learning, and contributes to building the knowledge economy. Second, several Saudi universities established deanships for e-learning and distance education, including King Saud University, King Fahd University of Petroleum and Minerals, King Faisal University, King Abdulaziz University, Imam Muhammad ibn Saud Islamic University, Umm Al-Qura

University, and King Khalid University (Almohamady, 2018). Furthermore, the Ministry of Education issued the regulation of distance education in Saudi higher education institutions in 2010.

Several studies were conducted on distance education to highlight its importance in education and identify its pros and cons; for example, Dabab and Brouis (2019) explored the challenges of distance education, such as poor internet connection, poor university websites, and student tendency to traditional education. They recommended forming the skills of cognitive and social adjustment to handle changes. Hamid (2019) examined the problems of distance education, showing that the administrative and financial regulations of Sudanese universities do not consider the students' social and economic conditions. Moreover, Altaweel (2018) aimed to identify academic problems faced by the students undertaking distance education. The results showed that the students should meet their academic advisor to highlight problems and reduce them. Mahlangu (2018) studied the pros, cons, and challenges of distance higher education; the results illustrated that e-learning education should be encouraged by updating the technological infrastructure, having high-speed internet, and carrying out regular maintenance. Moreover, lecturers and students should demonstrate skills, confidence, and knowledge of using electronic devices.

Bahmad and Totawy (2018) explored the impact of distance education on future anxiety among students as the most significant psychological factors affecting them. The results showed moderate future anxiety among the participants. Ahmed (2016) studied the most important means of distance education and their impact on promoting education from the faculty perspective. The findings showed obstacles to using modern educational means in distance education. Alharby (2016) identified the obstacles to distance education from the perspective of students at King Abdulaziz University. The results showed that the cost of electronic equipment, high cost of the internet, and poor internet connection negatively affect distance education. Moreover, Alqarny (2016) identified the obstacles affecting social interaction in distance education, such as lack of training programs, lack of understanding of student problems, and inappropriateness of some courses.

Alsebaey (2015) evaluated the use and obstacles of virtual classrooms in distance education programs from the students' perspective. The study recommended providing direct technical support to the users of virtual classrooms and on-campus infrastructure, including communication lines. Wang (2014) examined the challenges to distance education in Sweden and showed its sensory experience as,

unlike traditional education, it does not involve physical experience. Berge (2013) identified obstacles to distance education. While the psychological obstacles include depression, anxiety, and disorder due to the delayed feedback of the teacher, the social obstacles include poor social interaction between the student and the teacher and the lack of social skills. Afifi (2009) explored the need to distance education and application obstacles in Saudi Arabia from the faculty perspective. The study showed that distance education is required because it fits the contemporary inputs and provides self-learning and continuous learning. The obstacles include the lack of governing rules and regulations.

I conclude that it is difficult to list the impacts of distance education during COVID-19 because they vary, and a student may encounter one or more of them. These impacts are interrelated and threaten the social, psychological, and economic impacts of students; simply, traditional education may not respond to the conditions of crises easily. On the contrary, distance education can continue during crises because teachers and students do not exist at the same place and time (Commonwealth of Learning, 2020).

Meeting the psychological needs of community members during crises is basic in human and social help. Studies stress the need for psychological support under diseases and natural crises. They report that students are mostly prone to psychological disorders and physical damage under these conditions; thus, they must receive psychological and social support to provoke personal growth, promote personality hardiness, and develop adjustment to overcome crises and reduce their impacts. A social worker can play these professional roles to overcome the negative impacts of distance education.

Students, like other community groups, have encountered difficulties during COVID-19 and have experienced distance education. Moreover, they have suddenly experienced academic suspension and anxiety because of their academic grades, graduation, and traditional and non-traditional tests (Yang et al., 2020), and they have had to follow home quarantine. During COVID-19, governments and higher education institutions have launched many initiatives such as employing distance education to continue educational activities. However, various shortcomings should be addressed, e.g., weak teaching infrastructure online, lack of teachers' experience, information gap, and complicated environment at home, in order not to affect education in any way (Zhang et al., 2020).

Social work—and especially social workers—can play major roles in reducing the negative social, psychological, and economic impacts of distance education that affect students and promote student readiness during COVID-19 by making plans and developing programs and services. According to Sahu (2020), universities should take many measures to slow the spread of COVID-19, such as turning to distance education. Students' health and safety should be maintained, and appropriate counseling services should be provided to support their mental health and welfare, in order to make education more effective.

Williams and Forde (2020) explored the new roles of social workers during COVID-19, such as providing support to schools and universities for digital communication with guardians and providing financial aid to the poor families affected by social isolation. Aleshewy (2018) identified the treatment models of the social worker in managing the social crises facing students and the obstacles to practicing these models faced by social workers. The results showed that cognitive treatment is ranked first, while crisis intervention is ranked second. Idris (2018) examined the role of social work during crises and disasters and the obstacles to this role. The study recommended increasing the number of social workers and equipping them with knowledge, skills, and values by delivering specialized training and authorizing them to act during crises and disasters. In the same context, Bauwens and Naturale (2017) explored the role of social work during crises and traumatic events. The results showed that the roles including providing social support, establishing early intervention programs, and choosing the appropriate professional approaches.

Rapeli (2017) reported the weak plans of social work units in addressing crises and disasters because of their inappropriateness and the poor training of social workers in crisis management. In contrast, success factors include the effective evaluation of weaknesses and developing flexibility in risk management. Iravani and Parast (2014) argued that the roles of social workers in crisis management take place before the crisis by making plans and defining activities and available resources and during the crisis by providing psychological and social support. Tapfumaneyi (2013) reported that the psychological and social roles of the social worker in distance education include helping students resolve their social and psychological problems and improving academic achievement. The most significant psychological and social challenge is isolation resulting from digital communication. Furthermore, the counseling services provided by the social worker in distance education are rarely

employed by students because of the lack of qualification of the social worker in distance education and lack of counseling programs for distance education students. Due to COVID-19, more than 90% of students worldwide are attending educational institutions remotely, and none were ready for the crisis; thus, distance education is the means to continue education in most educational institutions (Aly, 2016). People should consider that they might not continue education traditionally due to crises and disasters. Therefore, comprehensive teamwork should be formulated to elaborate alternative scenarios, especially in education, by developing alternative educational means such as distance education and e-learning to communicate with students and educational institutions. This goal can be achieved by providing the required technology in educational institutions to meet the need for updates internationally. The focus should be on disseminating the culture of distance education among students and teachers and handling its mechanisms during crises and disasters (Othman, 2010).

All these events have motivated me to conduct the study to investigate the social, psychological, and economic impacts of distance education during COVID-19 among the students of Saudi universities, making suggestions to reduce these impacts. Being specialized in social work, I conducted the present study based on the professional role of the social worker in resolving community problems.

The Study

This study examines the social, psychological, and economic impacts of distance education during COVID-19 among the students ofUniversity and identifies the professional role of social work in handling such impacts of distant education among university students. To achieve these research goals, the following hypotheses have been set:

H1: There is a negative association between social worker's roles and the psychological impact of distance education on social work students.

H2: There is a negative association between social workers roles and the social impact of distance education on social work students

H3: There is a negative association between social workers roles and the economic impact of distance education on social work students

3. Methodology

As this study aims to determine the relationship between the social worker's role and the psychological, social, and economic impacts of distance education during COVID-19 from the perspective of students, the Structural Equation Modeling (SEM) technique is used. Firstly, confirmatory factor analysis (CFA) is performed to verify the factor structure of a set of observed items, which allows the researcher to test the hypothesis that an association between observed items and their underlying latent factors exists. Subsequently, SEM with Smart-PLS 3 software is utilized to explain the influence of the social worker's role on distance education's psychological, social, and economic impacts due to COVID-19.

3.1. Instrument and data collection

The questionnaire of the psychological, social, and economic impacts of distance education during COVID-19 on university students comprised 43 items. It was based on a closed-form and a five-point Likert scale. After reviewing the relevant literature, e.g., Addahshan (2020), Alfiqui and Ibrahim (2020), Altaweel (2018), Berge (2013), Czerniewicz (2020), Dabab and Brouis (2019), Hamid (2019), Williams and Forde (2020), Weeden and Cornwell (2020), and Zhai and Du (2020), the questionnaire was developed. It aimed at the psychological, social, and economic impacts of distance education on students during COVID-19. The preliminary form of the questionnaire comprised 46 items; then, it was presented to seven reviewers to give opinions. Based on their opinions, three items were deleted for irrelevance, and other items were rephrased. The instructions were to be answered clearly and to obtain accurate data for statistical analysis. The final form of the questionnaire included 43 items distributed in four dimensions as follow:

- The psychological impact of distance education during COVID-19
- The social impact of distance education during COVID-19
- The economic impact of distance education during COVID-19
- The professional role of the social worker during COVID-19

The questionnaire was then sent in April 2019 to 2,000 female undergraduate students from the college of social work via email. Several reminders were also sent to non-respondents, to increase the response rate, The final response rate was 16.7% ($n = 334$), and the margin of sampling error was $\pm 5\%$.

3.2. Sample Characteristics

The representative sample consists of 334 female undergraduate students from the target population. Around 41.9% of the students in the sample are aged between 19-21, 46.1% are aged between 22-24, which makes them the majority, and 12% of them are aged 25 or above. In addition, the sample is characterized by 15% of married female students and 85% of single students regarding the sample marital status.

3.3. Data analysis

As mentioned earlier, the collected data were analyzed using Smart-PLS 3 software to test the validity and reliability of the measurement model and assess the fit of the suggested model. Besides the descriptive statistics, the relative importance index (RII) for each item in the questionnaire is calculated, and the questionnaires' items were ranked based on their associated RII. According to Davoodi & Dağlı (2019), RII is a statistical technique used to find the most important items from the data in a questionnaire.

Results

Descriptive statistics

As previously stated, the questionnaire used in the current study contained 43 five-Likert scale items. The first section of the questionnaire consisted of 13 items measuring the psychological impact of distance education during COVID-19 on university students. The second section investigated the social impact of distance education on university students consisting of 18 items. The third section of the questionnaire consisted of 7 questions investigating the economic impact of distance education on university students. Finally, the last section in the questionnaire contained five questions measuring the professional role of the social worker at university during COVID-19. Table 1 below shows the mean, standard deviation, RII, and rank of items based on RII value for the 43 items included in the questionnaire.

Table 1. Descriptive statistics of questionnaire items

Code	Items	Mean	SD	RII	Rank
PS1	I am worried about getting the coronavirus.	3.530	1.141	0.706	11
PS2	I am terrified of someone in my family getting Covid 19	4.015	1.124	0.803	7
PS3	Home quarantine and the restriction of my freedom makes me feel imprisoned	2.976	1.414	0.595	16
PS4	I am worried about the continuation of distance learning for another semester	3.293	1.504	0.659	13
PS5	I am worried about my GPA	3.865	1.284	0.773	8
PS6	I'm worried because I can't understand the online lectures.	3.545	1.381	0.709	10
PS7	I'm constantly obsessed with losing my internet connection at the time of the exam.	4.261	1.238	0.852	3
PS8	I am afraid that the system will be exposed to viruses that will change my examination results.	3.518	1.486	0.704	12
PS9	I'm afraid the system will exclude me at the time of the exam	4.093	1.216	0.819	5
PS10	I'm afraid the system won't allow me to take the exam	4.165	1.136	0.833	4
PS11	I am afraid that the system will calculate incorrect scores	4.081	1.263	0.816	6
PS12	I am afraid that the computer will malfunction during the exam	4.296	1.071	0.859	2
PS13	I'm afraid the system will consider me disconnected.	3.596	1.404	0.719	9
Overall Psychological Impact		3.787	0.943	-	-
SO1	My family does not understand that I study online.	2.641	1.568	0.528	29
SO2	My family thinks I'm on vacation.	3.042	1.565	0.608	15
SO3	My family does not understand the meaning of virtual classes	2.461	1.457	0.492	33
SO4	I suffer from disturbing my family during virtual classes	2.734	1.532	0.547	26
SO5	My family took us to our village, and I lost good contact with the university.	2.039	1.427	0.408	42
SO6	Many family problems during the quarantine period affect my educational follow-up.	2.743	1.489	0.549	24
SO7	I face many problems with my father due to the quarantine, and my follow-up to my online lectures is affected.	2.320	1.519	0.464	39
SO8	My family expects me to talk to my girlfriends, and I'm not in a virtual class.	2.374	1.569	0.475	38
SO9	My family members share a computer with me, which prevents me from entering class on time.	2.410	1.558	0.482	36
SO10	My father continues his work through my computer.	2.093	1.438	0.419	41
SO11	My family expects that a mobile device is sufficient to follow my lectures	2.650	1.581	0.530	27
SO12	I suffer from annoyance with my brothers at the time of the lecture	2.784	1.521	0.557	22
SO13	A lot of friction with the family creates a lot of problems	2.928	1.442	0.586	18
SO14	I miss my friends so much	4.380	1.047	0.876	1
SO15	My husband does not take into account the periods of virtual classes with his requests.	2.273	1.380	0.454	40
SO16	Annoying my children and their requests distracts my focus in the virtual classroom.	2.458	1.482	0.492	34
SO17	My family believes that living in the village protects us from infection with the disease.	2.401	1.458	0.480	37
SO18	My family insists on hiking, which may make me miss one of the exams.	2.024	1.324	0.405	43
Overall Social Impact		2.597	1.160	-	-
EC1	I don't have a computer	2.614	1.625	0.523	30
EC2	My computer is old	2.874	1.543	0.575	19
EC3	My computer broke down, and it wasn't easy to buy another	2.503	1.549	0.501	32
EC4	It costs me a lot to buy recharge cards to find the best	2.596	1.558	0.519	31
EC5	The internet costs me a lot to share with my brothers	2.647	1.596	0.529	28
EC6	The family shares one computer	2.734	1.551	0.547	25
EC7	Many members of my family study online, and this is expensive for the family.	2.428	1.565	0.486	35
Overall Economic Impacts		2.628	1.275	-	-
SW1	There is a quick way to contact the social worker at the university	3.213	1.220	0.643	14
SW2	I benefited from the social worker to ease the severity of the crisis	2.808	1.294	0.562	21
SW3	The social worker used good methods to alleviate the crisis	2.973	1.293	0.595	17
SW4	The social worker guided me on how to deal with my family problems	2.826	1.262	0.565	20
SW5	The social worker helped me to overcome my financial problems	2.743	1.280	0.549	23
Overall Social Worker's Role		2.912	1.142	-	-

For the psychological impacts dimension, the item means ranged from 2.976 to 4.380, the RII values ranged from 0.595 to 0.859, and the overall mean for this dimension was 2.597 (SD = 1.160). Similarly, for the social impacts dimension, the item means ranged from 2.024 to 4.296, the RII values ranged from 0.405 to 0.876, and the overall mean for this dimension was 3.787 (SD = 0.943). Regarding the economic impacts dimension, the item means ranged from 2.428 to 2.874, the RII values ranged from 0.486 to 0.575, and the overall mean for this dimension was 2.628 (SD = 1.275). Finally, for the social worker's role dimension, the item means ranged from 2.743 to 3.213, the RII values ranged from 0.549 to 0.643, and the overall mean for this dimension was 2.912 (SD = 1.142).

Based on RII values, the highest five ranked items belong to "Social Impact" and "Psychological Impact" dimensions; Those items were "SO14", "PS12", "PS7", "PS10", and "PS9", with RII values that ranged between 0.819 and 0.876. On the other hand, the lowest five ranked items belonged to the "Social Impact" dimension. Those items were "SO7", "SO15", "SO10", "So5", and "SO18", with RII values that ranged between 0.405 and 0.464.

Measurement model assessment

Several features of the measurement model, such as; internal consistency, convergent validity, and discriminant validity, are conducted to ensure the quality of the instrument used in the current study; The following sub-sections explain these features.

Internal Consistency

To measure the instrument's internal consistency, the current study observed the standardized factor loadings (SFL) to assess the validity of each item. According to Hair et al. (2016), the threshold for SFL is 0.7. The study disregarded SFL less than 0.7 during path analysis. Table 2 shows the SFL of all the items. The study also examined the value of Cronbach's alpha and composite reliability to assess the construct reliability, which Hair et al. (2016) suggested should be greater than or equal to 0.7. Construct reliability was confirmed as demonstrated in Table 2, in which the Cronbach's alpha and composite reliability scores are greater than 0.7.

Table 2. Measurement model results

Factors	Items	SFL ^a	α^b	CR ^c	AVE ^d
Psychological Impact	PS1	0.81	0.94	0.94	0.627
	PS2	0.84			
	PS3*	-			
	PS4*	-			
	PS5	0.70			
	PS6*	-			
	PS7	0.78			
	PS8	0.79			
	PS9	0.84			
	PS10	0.83			
	PS11	0.80			
	PS12	0.77			
	PS13	0.77			
Social Impact	SO1	0.78	0.97	0.97	0.66
	SO2	0.81			
	SO3	0.84			
	SO4	0.83			
	SO5	0.86			
	SO6	0.8			
	SO7	0.87			
	SO8	0.85			
	SO9	0.71			
	SO10	0.78			
	SO11	0.77			
	SO12	0.79			
	SO13*	-			
	SO14*	-			
	SO15	0.81			
	SO16	0.79			
	SO17	0.85			
	SO18	0.85			
Economic Impacts	EC1	0.83	0.91	0.93	0.66
	EC2	0.74			
	EC3	0.83			
	EC4	0.87			
	EC5	0.86			
	EC6	0.72			
	EC7	0.83			
Social Worker's Role	SW1	0.70	0.94	0.95	0.80
	SW2	0.96			
	SW3	0.88			
	SW4	0.96			
	SW5	0.95			

^a Standardized loading. ^b Cronbach's alpha. ^c Composite Reliability. ^d Average Variance Extracted. * Deleted Items

Convergent validity

The study examined the average variance extracted (AVE) to measure the convergent validity, which should be greater than 0.5 as Hair et al. (2016) recommended. Based on Table 2, the AVE values for all factors are greater than 0.5, which demonstrates acceptable convergent validity.

Discriminant validity

To test the discriminant validity, the Heterotrait-Monotrait ratio of correlations (HTMT) are used. According to Henseler et al. (2015), the HTMT value should be less than 0.9 to be acceptable. Based on Table 3, the highest HTMT value was 0.87, suggesting that discriminant validity is accepted for the study model.

Table 3. Discriminant validity results

	Economic Impacts	Psychological Impact	Social Impact	Social Worker's Role
Economic Impacts	-	0.421	0.874	0.219
Psychological Impact	0.421	-	0.396	0.156
Social Impact	0.874	0.396	-	0.224
Social Worker's Role	0.219	0.156	0.224	-

Structural model assessment

The present study evaluated the structural model using the coefficient of determination (R²) and the model's predictive relevance (Q²) to measure the quality of the structural model. In this study, the R² values are ranged from 0.06 to 0.69, and the Q² values are ranged from 0.04 to 0.45, which are greater than the threshold limit of zero and indicates that the structural model's overall effect size and predictive relevance are adequate (Henseler et al., 2009).

Model fit

According to Shi et al. (2018), the standard root-mean-square residual (SRMR) is a goodness of fit measure used as an index for fitting models. Values of zero in SRMR mean that the fitted model is a perfect fit. However, Cangur & Ercan (2015) considers any values less than 0.08 to be generally a good fit. The current study's structural model fitted well with the empirical data since the value obtained was 0.035.

Hypotheses testing

The sizes and p-values of the path coefficients represent the derived hypotheses. The path coefficients' p-values were found using the PLS technique, with a resampling bootstrapping procedure comprising of 10,000 bootstrap samples and 334 bootstrap cases. The path coefficients (β), standard errors (SE), t-values and p-values are shown in Table 4.

Table 4. Structural model results

	β	SE	t-value	p-value
Social Worker's Role --> Economic Impacts	-0.253	0.055	4.463	0.000
Social Worker's Role --> Psychological Impact	-0.219	0.042	4.825	0.000
Social Worker's Role --> Social Impact	-0.304	0.050	5.856	0.000

Discation

This study sought to identify the psychological, social, and economic impact of distance education on female social work students and the professional role of the social worker in dealing with the negative effects on students. This included shedding light on two variables: the most important psychological, social, and economic problems that female students face because of distance education. The second variable: examines the relationship between the roles of the social worker and the negative psychological, social, and economic effects on students due to distance education. The results of the study came to emphasize the importance of the role of the social worker in dealing with students' problems resulting from this new system, which constituted confusion on the psychological and social level for students represented in the loss of social life in a period when social relations are considered sacred for young people, as well as the low level of psychological well-being and the prevalence of feelings of fear anxiety and tension. In general, the study confirmed all three hypotheses and indicated that the social worker's role effect on social impacts was highest. Looking at the relative importance index, we find that the most important expressions focus on the social and psychological dimensions. In the social dimension, we find that the students referred to the intense longing for friends (SO14) as one of the most important effects of distance education on students' social lives. Tuncay (2020) pointed out that the absence of interaction between students due to distance education affects students' social life, represented in the direct interaction and team and cooperative work that characterizes students of social work. Despite the technological development and good infrastructure of many universities, the social interaction between students is difficult to overcome in distance education, and the greatest impact remains on university students (Durnali, 2020). The disruption of the daily routine of social life due to distance education during the pandemic constituted a disorder for students, and this may cause psychosocial problems (Al Lily et al., 2020). This may appear in university students with learning disabilities who may suffer from higher levels of social distress and loneliness than the other students (Sharabi and Margalit, 2014).

In terms of psychological effects, we find that distance education also increased students' anxiety and fears regarding internet interruption or a system glitch at the time of the test, as it appeared in the phrases (PS7, PS9, PS10, PS12), as potential technical problems make students in a state of insensitivity safety because this may

lead to problems affecting the academic status of students (Galusha, 1998). This result is supported by many studies whose results indicate that the potential problems of distance education cause a decrease in psychological well-being due to the high levels of stress, emotional disturbance, and anxiety (Cataudella et al., 2020). Because of this educational system, most students face moderate to severe stress and the appearance of symptoms of anxiety and depression. In this case, students with poor academic performance are more vulnerable than others to mental health problems (Lee et al., 2021). Perhaps this result is also affected by the students' academic self-perceptions and the consequent level of satisfaction with virtual education in general (Algahtani et al., 2021).

An investigation of path coefficients and p-values recommends that all proposed hypotheses were supported at a 0.05 significance level. According to the structural model results in Table 4, the effect of social worker's role on economic impacts ($\beta = -0.253$, p-value < 0.001), the effect of social worker's role on psychological impacts ($\beta = -0.219$, p-value < 0.001), and the effect of social worker's role on social impacts ($\beta = -0.304$, p-value < 0.001) are significant. This result agrees with the study conducted by Li et al. (2020), which showed that the social support and university guidance services provided by specialists in this field contributed to reducing the negative effects of students' various pressures due to distance education during the Covid 19 procedures. Also, the results of Ghafari et al. (2021) and the study by Labraque et al. (2021) showed that the social support provided to students reduced mental health problems and contributed to less emotional and social loneliness.

Implication for social work practice

Given the results that provided indicators about the psychological, social, and economic situation of students during the distance education period, it is possible to suggest some important strategies to intervene with students in the current period with the continuation of distance education and the subsequent period during the recovery phase and return to normal life after Covid 19. The study showed an urgent need for psychosocial support for students during the current and recovery periods. As pointed out by Hefner & Eisenberg (2009) that students who have lower-quality social support are at risk of social isolation and are more prone to mental health problems such as depression than others. Therefore, intensive support for students, whether in the current situation in virtual meetings or during recovery and return, requires a great effort from social workers. During the distance education period, the social worker can provide psychosocial support through well-known programs such

as Microsoft Teams, Zoom, and WebX. Given the cultural sensitivity in some societies, such as conservative societies, a female social worker can provide these services to female students, and a male can provide them to male students, to ensure that females benefit from these services and are not subject to discrimination and persecution in the use of such services in this context. In addition to the possibility of developing interactive groups led by the social worker and opening them through virtual meetings, and allowing the students to get to know each other and share their concerns and future aspirations. As for the recovery period, the social worker's role should focus on all psychological, social, and economic aspects through psychosocial support programs that ensure students interact, participate, and integrate into university life again. It also requires the social worker to work with new students whose first year was a difficult experience, and they were deprived of the concept of friendship, which may constitute an obstacle for them during the adjustment period. They may be at risk of social isolation. Buote et al. (2007) indicated the importance of new friendships in helping students adapt to a new social environment. Therefore, it is assumed that the social worker in the psychosocial support unit within the universities develops activities that contribute to the involvement of students, specifically students who have been deprived of the university atmosphere as a result of precautionary measures. Develop a counseling program on dealing with stress and make students in general and new ones in particular familiar with it and encourage them to benefit from it.

Ethics

All procedures in this study were approved by the institutional review board of ... University.

Conclusion

This study provides a framework for the most important professional roles of the social worker in dealing with the negative psychological, social, and economic effects of distance education during COVID-19 on female students in the Kingdom of Saudi Arabia. Despite the cultural restrictions associated with communicating with the social worker to solve problems, the study showed the importance of the professional role played by the social worker at various levels to help the students overcome the crisis. This study also provides important indicators for the professional practice of social work to work with students in the next stage of recovery. Where the psychological and social impact of distance education made an urgent need for psychosocial support programs and re-created the atmosphere of interaction between students again, therefore, it is expected that the new roles of the social worker in the next stage will focus on recovery and helping students overcome issues related to mental health and social interaction and preparing them to return to a normal life.

References

- Addahshan, G. (2020). Crisis of education and learning during COVID-19: Horizons and challenges. Retrieved from <https://bit.ly/325IkKa>.
- Afifi, M. (2009). Distance education in Saudi Arabia: Requirements and obstacles. *Journal of King Khalid University for Sharia, Arab, and Humanities Sciences*, 7(13), 33–71.
- Ahmed, H. (2016). Employing modern educational means in distance education at Sudan University of Science and technology and its impact on promoting education from the faculty perspective. *Journal of Educational Sciences*, 17(2), 116–134.
- Al Lily, A. E., Ismail, A. F., Abunasser, F. M., & Alqahtani, R. H. A. (2020). Distance education as a response to pandemics: Coronavirus and Arab culture. *Technology in society*, 63, 101317, 1-11.
- Aleshewy, M. (2018). A proposal for professional practice with individuals in managing the crises facing university students. *Journal of Humanities and Social Sciences*, 35(137), 9–36.
- Alfiqi, A. & Ibrahim, A. (2020). Psychological problems caused by COVID-19: A descriptive exploratory in a sample of university students in Egypt. *Journal of Education-Sohag University*, 74(3), 1047–1089.
- Algahtani, F. D., Zrieq, R., Aldhmadi, B. K., Atta, A., Obeidat, R. M., & Kadri, A. (2021). Academic Self-Perception and Course Satisfaction among University Students Taking Virtual Classes during the COVID-19 Pandemic in the Kingdom of Saudi-Arabia (KSA). *Education Sciences*, 11(3), 134.
- Alharby, M. (2016). Obstacles to distance education from the students' perspectives at King Abdulaziz University. *Journal of Reading and Knowledge*, 175, 55–80.
- Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 Pandemic. *Higher Education Studies*, 10(3), 16–25.
- Almalahy, W. (2006). *Social demand for open university education in Egypt in the light of contemporary local and international changes* (Master's thesis). Mansoura University, Egypt.
- Almohamady, G. (2018). Evaluating the reality of using e-learning management system (EMES) at King Abdulaziz University from the student perspective. *Basic Education College Journal for Educational and Humanities Sciences*, 39, 177–196.
- Alqarny, A. (2016). Social interaction in virtual communities. *Journal of Reading and Knowledge*, 179, 1–32.
- Alsaif, M. (2009). *Availability of e-learning competencies, obstacles, and methods of development from the faculty perspective at the College of Education, King Saud University* (Master's thesis). King Saud University, Saudi Arabia.
- Alsebaey, A. (2015). Evaluation of virtual classrooms in distance education problems: Imam Muhammad ibn Saud Islamic University as a model. *Journal of the Faculty of Education in Benha*, 26(45), 82–103.
- Alshahry, Z. (2014). Evaluation of e-learning in Saudi higher education. *International Interdisciplinary Journal of Education*, 3(6), 63–79.

- Altaweel, I. (2018). Academic problems facing the students of distance education at Imam Muhammad ibn Saud Islamic University and suggestions to overcome them. *Journal of the Faculty of Women for Arts, Science and Education*, 1(19), 149–186.
- Aly, A. (2016). Psychological problems among students at the University of Aden. *Journal of Social Affairs*, 23(132), 35–70.
- Amer, T. (2007). *Distance education and open education*. Jordan: Yazori Book Store.
- An-Najm, Q. (2019). Distance education and future challenges. *Journal of Islamic Bhoth*, 5(41), 131–160.
- Assalih, B. (2007). University virtual education: A comparative study of selected Arab and foreign virtual universities. *Journal of the Colleges of Teachers*, 7(1), 245–291.
- Awaj, S., & Samia, T. (2016). *The role of social media in supporting distance education among university students*. Paper presented at the 11th International Conference “Education in the Era of Digital Technology”, Jil Scientific Research Center, Tripoli.
- Bahmad, G., & Totawy, M. (2018). Future anxiety among distance education students in Tizi Ouzou and Béjaïa Provinces. *Journal of Psychological Educational Sciences*, 7(2), 306–369.
- Bauwens, J., & Naturale, A. (2017). The role of social work in the aftermath of disasters and traumatic events. *Clinical Social Work Journal*, 45, 99–101. <https://doi.org/10.1007/s10615-017-0623-8>.
- Berge, Z. (2013). Barriers to communication in distance education. *Turkish Online Journal of Distance Education*, 14(1), 374–388.
- Buote, V. M., Pancer, S. M., Pratt, M. W., Adams, G., Birnie-Lefcovitch, S., Polivy, J., & Wintre, M. G. (2007). The importance of friends: Friendship and adjustment among 1st-year university students. *Journal of adolescent research*, 22(6), 665-689.
- Cangur, S., & Ercan, I. (2015). Comparison of model fit indices used in structural equation modeling under multivariate normality. *Journal of Modern Applied Statistical Methods*, 14(1), 14.
- Cataudella, S., Carta, S., Mascia, M. L., Masala, C., Petretto, D. R., & Penna, M. P. (2020). Psychological aspects of students with learning disabilities in e-environments: A mini review and future research directions. *Frontiers in Psychology*, 11.
- Center for E-learning and Distance Learning (2019). *About the center*. Retrieved from <https://nelc.gov.sa/en/homepage>.
- Commonwealth of Learning (2020). *Guidelines on distance education during COVID-19*. Burnaby: Commonwealth of Learning.
- Czerniewicz, L. (2020). What we learnt from “going online” during university shutdowns in South Africa. Retrieved from <https://philonedtech.com/what-we-learnt-from-going-online-during-university-shutdowns-in-south-africa/>.
- Dabab, Z., & Brouis, W. (2019). Obstacles of digital education in the Algerian school. *The Arab Journal of Arts and Humanities*, 7, 153–168.
- Davoodi, T., & Dağlı, U. U. (2019). Exploring the determinants of residential satisfaction in historic urban quarters: Towards sustainability of the Walled City Famagusta, North Cyprus. *Sustainability*, 11(22), 6261.
- Durnali, M. (Ed.). (2020). *Enriching Teaching and Learning Environments With Contemporary Technologies*. IGI Global.
- Galusha, J. (1998). Barriers to Learning in Distance Education. University of Southern Mississippi. Retrieved March 12, 2021 from <https://eric.ed.gov/?id=ED416377>

- Ghafari, R., Mirghafourvand, M., Rouhi, M., & Tabrizi, S. O. (2021). Mental health and its relationship with social support in Iranian students during the COVID-19 pandemic. *BMC psychology*, 9(1), 1-8.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hamid, S. (2019). Obstacles to distance education at Sudanese universities. *Journal of Educational Sciences*, 20(1), 33–47.
- Hefner, J., & Eisenberg, D. (2009). Social support and mental health among college students. *American Journal of Orthopsychiatry*, 79(4), 491-499.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald Group Publishing Limited.
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y. ... Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506. <https://doi.org/10.1016/S0140-6736>.
- Idris, A. (2018). A proposal for the role of social work in the field of crises and disasters. *Journal of Social Affairs*, 35(137), 9–36.
- Iravani, M., & Parast, S. (2014). Examine the role of social workers in crisis management. *Journal of Sociology and Social Work*, 2(1), 87–97.
- Labraque, L. J., De los Santos, J. A. A. & Falguera, C., (2021). Social and emotional loneliness among college students during the COVID-19 pandemic: the predictive role of coping behaviours, social support, and personal resilience. *Perspect Psychiatric Care*, 4(6), s.1-7.
- Lee, J., Jeong, H. J., & Kim, S. (2021). Stress, anxiety, and depression among undergraduate students during the COVID-19 pandemic and their use of mental health services. *Innovative higher education*, 1-20.
- Li, X., Wu, H., Meng, F., Li, L., Wang, Y., & Zhou, M. (2020). Relations of COVID-19-related stressors and social support to Chinese college students' psychological response during the COVID-19 epidemic. *Frontiers in Psychiatry*, 11, 1084.
- Mahlangu, V. (2018). The good, the bad, and the ugly of distance learning in higher education. In: M. Sinecen (ed.), *Trends in E-learning*, pp. 17–29. London: IntechOpen.
- Michael, P. (2020). COVID-19 and emergency e-learning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 41(3), 492–505.
- Othman, H. (2010). The role of distance education in crises and disasters. *E-Learning Magazine*, 5(7). <http://emag.mans.edu.eg/index.php?page=news&task=show&id=54&sessionID=14>.
- Rapeli, M. (2017). *The role of social work in disaster management in Finland* (Doctoral dissertation). University of Jyväskylä, Finland.
- Sahu, P. (2020). Closure of universities due to Coronavirus Disease 2019 (COVID-19): Impact on education and mental health of students and academic staff. *Cureus*, 12(4): e7541. <https://doi.org/10.7759/cureus.7541>.

- Saudi Council of Higher Education (2011). *Regulation of distance education in higher education institutions in Saudi Arabia*. Riyadh: General Secretariat.
- Saudi Ministry of Education (2011). *National Register of Higher Education* (1st ed.). Riyadh: Center for Research and Studies in Higher Education.
- Sharabi, A., & Margalit, M. (2014). Predictors of positive mood and negative mood among children with learning disabilities (LD) and their peers. *International Journal for Research in Learning Disabilities*, 2(1), 18-41.
- Shi, D., Maydeu-Olivares, A., & DiStefano, C. (2018). The relationship between the standardized root mean square residual and model misspecification in factor analysis models. *Multivariate Behavioral Research*, 53(5), 676-694.
- Tapfumaneyi, K. (2013). The challenges of student counseling in open and distance learning: The case of Zimbabwe Open University. *International Journal of Advanced Research*, 1(5), 549–556.
- Tuncay, T. (2020). Online Social Work Education: Opportunities and Obstacles. *Turkish Journal Of Social Work Research*, 4(1), 18-25.
- Wang, H. (2014). *Challenges for distance education: A cultural analytic perspective on asynchronous online courses in Sweden* (Master's thesis). Lund University, Sweden.
- Weeden, K., & Cornwell, B. (2020). The small-world network of college classes: Implications for epidemic spread on a university campus. *Sociological Science*, 7(9), 222–241.
- Williams, K. & Forde, E. (2020). Social workers stand ready in the COVID-19 fight. Retrieved from <http://jamaica-gleaner.com/article/news/20200318/social-workers-stand-ready-covid-19-fight>.
- Working Group on Distance Education and Open Learning (2001). *Distance education and open learning on Sub-Saharan Africa: A literature survey on policy and practice*. Tunis: Association for the Development of Education in Africa.
- Yang, J., Kang, L., Ma, S., Chen, M., Waing, Y., Ruiting, L. ... Liu, Z. (2020). Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. *Brain, Behavior, and Immunity*, 87, 11–17. [https://doi.org/10.1016/S0140-6736\(20\)30154-9](https://doi.org/10.1016/S0140-6736(20)30154-9).
- Zain-elddin, M. (2006). *Impact of e-learning in Egyptian middle schools on students' achievement and attitudes*. Paper presented to the Conference of the System of Scientific Research in Egypt (Challenges- Standards- Future Perspectives), Suez Canal University, Egypt.
- Zhai, Y., & Du, X. (2020). Mental health care for international Chinese students affected by the COVID-19 outbreak. *The Lancet Psychiatry*, 7 (4), 22.
- Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. *Journal of Risk and Financial Management*, 13(55), 1–6. <https://doi.org/10.3390/jrfm13030055>.