

Are Working Mothers the Biggest Losers in the Corona Pandemic? The perceived stress, social support, online learning satisfaction, and coping strategies among working mothers during the COVID-19 pandemic

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Abstract

Objectives: The primary objective of this cross-sectional study is to investigate perceived stress, perceived social support, satisfaction with online learning, and coping strategies among working mothers in Jordan during the COVID-19 pandemic.

Methods: A total of 204 working mothers participated in an online survey. Four instruments were employed to collect data related to all study variables. Those instruments were: Perceived Stressors Scale (PSS), Multidimensional Scale of Social Support (MSPSS), the Brief Coping Orientation to Problems Experienced (B-COPE) Inventory, and Distance Learning Satisfaction Scale (DLSAT). We used descriptive statistics, Pearson's correlation coefficients, and internal consistency in analyzing data for all variables.

Results: The results revealed that working mothers reported a high level of perceived stress ($M = 44.15$, $SD = 7.25$), a low level of perceived social support ($M = 29.78$, $SD = 9.41$), a low level of satisfaction with online learning ($M = 17.50$, $SD = 6.60$), and a moderate level of effectively coping with their life circumstances ($M = 60.56$, $SD = 11.07$). Furthermore, the mothers' perceived stressors, perceived social support, and satisfaction with children's online learning were all significantly associated with the score of coping strategies.

Conclusions: As working mothers are of the most vulnerable groups who was affected during the corona-virus disease (COVID-19) pandemic, the results in this study are significant in providing essential support and resources for them to cope with stress in the future and identify effective coping strategies for their well-being.

Keywords: COVID-19, perceived stress, perceived social support, online learning satisfaction, coping strategies, working mothers.

هل الأمهات العاملات أكبر الخاسرين في جائحة كورونا؟ الضغوطات المدركة والدعم الاجتماعي المدرك والرضا عن التعلم عن بعد واستراتيجيات التكيف بين الأمهات العاملات أثناء جائحة كورونا

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الأهداف: تهدف هذه الدراسة إلى استقصاء الضغوطات المدركة، والدعم الاجتماعي المدرك، والرضا عن التعلم عن بعد، واستراتيجيات التكيف المستخدمة من قبل الأمهات العاملات في الأردن خلال جائحة كورونا.

المنهجية: شارك في الدراسة 204 من الأمهات العاملات في استطلاع عبر الإنترنت. وقد تم استخدام أربع أدوات لجمع البيانات المتعلقة بمتغيرات الدراسة: هي مقياس الضغوطات المدركة (PSS)، المقياس متعدد الأبعاد للدعم الاجتماعي (MSPSS)، مقياس توجهات التكيف الموجز للمشكلات التي تمت مواجهتها (B-COPE)، ومقياس الرضا عن التعلم عن بعد (DLSAT). ولتحليل بيانات جميع متغيرات الدراسة؛ استخدم الباحثون الإحصاء الوصفي، وحساب معاملات ارتباط بيرسون، وتقييم الاتساق الداخلي.

النتائج: كشفت النتائج عن مستوى عالٍ من الضغوطات المدركة لدى الأمهات العاملات ($M = 44.15$, $SD = 7.25$). مستوى منخفض من الدعم الاجتماعي المدرك ($M = 29.78$, $SD = 9.41$)، ومستوى منخفض من الرضا عن التعلم عن بعد ($M = 17.50$, $SD = 6.60$)، ومستوى متوسط من التكيف الفعال مع ظروف الحياة ($M = 60.56$, $SD = 11.07$). علاوة على ذلك، فإن درجات الضغوطات المدركة للأمهات العاملات، والدعم الاجتماعي المدرك، والرضا عن تعلم الأطفال عن بعد كانت جميعها مرتبطة بشكل كبير بنتيجة استراتيجيات التكيف.

خلاصة الدراسة: بما أن الأمهات العاملات هن من أكثر الفئات ضعفاً واللواتي تأثرن أثناء جائحة فيروس كورونا (COVID-19)؛ فإن نتائج هذه الدراسة مهمة في توفير الدعم والموارد الأساسية لهن للتعامل مع الضغوطات في المستقبل، وتحديد استراتيجيات التكيف الفعالة لرفاهيتهن.

الكلمات الدالة: جائحة كورونا، الضغوطات المدركة، الدعم الاجتماعي المدرك، الرضا عن التعلم عن بعد، استراتيجيات التكيف، الأمهات العاملات.

INTRODUCTION

On February 11, 2020, the World Health Organization (WHO) declared the official name of the virus that affected the world as COVID-19, an abbreviation for coronavirus disease 2019 (Jena, 2020). The (COVID-19) pandemic and the extensive measures to limit the spread of the virus have dramatically transformed the daily activities and behaviors of individuals (Donker, 2021). This phenomenon is inevitable with the imposed home quarantine and social distancing. Nevertheless, these restrictions have caused various psychological impacts on individuals, such as negative feelings of pressure or lack of control due to lifestyle changes (Olaimat, et al., 2022).

Additionally, the education system has been affected significantly. This situation required educational institutions to switch, almost overnight, to online learning applying more pressure on students and their families. The pandemic is an anxious time for students, parents, and teachers. People became uncertain about when life will return to “normal”, which compound their anxiety (Daniel, 2020; Shawaqfeh, 2022).

Specifically, the United Nations (UN) Social and Economic Commission for Western Asia ESCWA (United Nations Economic and Social Commission for Western Asia [ESCWA], 2020), and UN Women discovered that the social and economic challenges faced by women in the Arab region have worsened due to the pandemic. Women particularly experience the negative multiplier effects on social and economic levels due to their multiple social roles as mothers, workers, and wives. Moreover, women also generally have lower incomes and job security (Al Momani, 2017).

Previous studies have indicated that the working-mother group is the most affected and vulnerable concerning conflict of interests than non-working mothers (Biller, 1993). In particular, the Government of Jordan has created a partnership with the United States Agency International Development ([USAID, (Jordan: Country Development Cooperation Strategy [CDCS], 2021) to help vulnerable groups, including women and youths, in education, health, and resilience programs. Although more than 70% of Jordanian women currently work outside their homes, their “traditional” duties such as household management, childcare, and other domestic responsibilities have not been reduced. Notably, working mothers often display an increased level of pressure. Thus, extra coping resources are needed to reduce the harmful effects of stress on women's physical and mental health.

Past studies have also discovered that work-family issues could significantly affect work effectiveness and life quality (Ramos et al., 2015). In most households, the distribution of family care and domestic work is unequal between men and women. Females, mainly working mothers, are responsible for securing their jobs, caring for the family, and managing the homes due to social traditions. Therefore, they tend to shoulder these increased responsibilities due to school closures, isolation of the elderly due to movement restrictions, and the growing number of sick family members. Thus, the COVID-19 pandemic has affected the world's health, social, economic, and education systems and is an ultimate test for human beings.

Moreover, the spread of the COVID-19 has forced parents to stay home with their children (Fisher, et al., 2020), influencing their well-being and stress in handling their children and work-life (Collins et al., 2021). In this study, the working mothers played multiple roles that create role conflict and role stress, contributing to stress (Erdwins et al., 2021). Previous studies have addressed that an individual's active participation in one role could distract them from another role simultaneously (Cardenas et al., 2004). In other words, when an individual dedicates additional energy and time to work, the family role could be compromised and vice versa (Noor, 2004). Thus, work quality and family life depend on the conflict between these multiple roles. Since women are expected to bear the primary responsibility of the home front for the family, they tend to face additional conflict when they assume multiple roles (Cardenas et al.2004).

Despite its significance, studies on working-mother issues during the COVID-19 pandemic are still limited. Prior studies focused more on the benefits of family time (Flood et al., 2020; Milkie et al., 2019) and family support (Collins, 2009; Dow, 2019). Therefore, it is vital to explore the women's perception of stress, social support, and coping strategies in order to identify their abilities in coping with additional burdens due to school closure and the need to teach their children remotely during the COVID-19 pandemic. Ultimately, the current study addresses four major variables, i.e., perceived stress, perceived social support, online learning satisfaction, and coping methods.

Conceptualization of Terms

Perceived Stress: Perceived stress is the events that are perceived to be uncontrollable that often induce stress. For example, certain life events might put high demands on an individual. If the perceptions of controlling them are low, the events will likely create stress (Bani- Mustafa & Al-Shiyab, 2020; Hansen et al., 2010). Past studies have reported a significant relationship between perceived stress and mental disorders (Al-Nasa'h et al., 2019; Hewitt et al., 1992). It could be observed that the COVID-19 pandemic has placed unexpected extra demands on working mothers. Thus, it is crucial to analyze the mothers' perception of stress in this time of difficulty. This study utilized the PSS to estimate the perceived stress among working mothers due to the COVID-19 epidemic (Almadi et al., 2012; Cohen, 1983).

Perceived Social Support: Decreasing social interaction is the main preventive method to curb the spread of COVID-19. This situation produces an unwanted effect on social interaction and support between individuals. Generally, individual perception of social support is crucial for human well-being. During the COVID-19 crisis, social support could be considered a coping strategy (Saltzman et al., 2020). Past literature has revealed the significance of the social support element during this crisis (Stone et al., 2003; Al-Nasa'h et al., 2019). Despite this fact, there is insufficient data on the perceived social support among working mothers. Thus, this study applied the MSPSS to measure the level of perceived support among working mothers during the COVID-19 pandemic (Zimet et al., 1988).

Online Learning Satisfaction: The impact of the COVID-19 outbreak is experienced by the educational system worldwide. In fact, as much as 80% of the total student population worldwide was affected by school closures in more than 138 countries. Due to this infectious disease, school closure is a necessary precautionary step to contain its spread. Nevertheless, the closures have created unprecedented challenges to governments, individuals, and societies to ensure the continuity of the learning process among students. The closure has also affected various sectors, including academic, economic, social, and family. Online learning is student-centered; therefore, students' satisfaction is a main factor considered in evaluating its quality (Bashir, 2019, Mtebe & Raisamo, 2014; Shahroury, Al-Tarawneh & Al-Zoubi, 2022; Yasin et al., 2022). Students' satisfaction indicates students succeed and enjoy learning (Bashir, 2019). Previous studies have identified the level of student satisfaction towards online learning before and during the outbreak (Adnan & Anwar, 2020; Bray et al., 2008; Chen et al., 2020). A few has studied parents' satisfaction during the pandemic. Lee et al. (2021) shed light on parents' satisfaction related to their children's online learning during COVID-19. Parents report a high level of stress when they experience more difficulties in supporting their child's learning, which is the case that the world faced suddenly because of the pandemic (Lee et al., 2021). It should be noted that this study is the first to measure the working mothers' satisfaction level towards the online learning process for their children.

Coping Strategies: The COVID-19 epidemic has drastically changed people's lives. The rapid spread and contagious nature of the epidemic, coupled with no specific cure at this stage, have significantly threatened the human psyche and the health sector. The preventive measures imposed by governments in the economic, social, and educational sectors have affected individual mental health due to people experiencing different severity of psychological stress (Huang et al., 2020). Interestingly, it was reported that women were more concerned about COVID-19 than men (Gerhold, 2020) were. Research also revealed that women were more likely to feel agonized from the outbreak (Rodriguez et al., 2020). Generally, people under stress tend to react negatively, while others remain resilient. Therefore, the outcome depends on how individuals cope with stressful situations (Altrurk, 2022). Coping strategies refer to cognitive and behavioral efforts that the individual use to reduce the stress of a situation (Babore et al., 2020) coping strategies are also useful when the demands of a task exceed the individual's resources (Babore et al., 2020). The use of coping strategies lowers the levels of stress. Previous research has identified two main coping strategies, namely emotion-focused and problem-focused. This study used the Problems Experienced utilizing (COPE) inventory to determine the working mothers' coping orientation during the COVID-19 pandemic (Alghamdi, 2020; Zimet et al., 1990).

Objectives of the Study

This study examines the impact of COVID-19 among working mothers in light of some variables. The objectives of this study are:

First, this study investigates perceived stress, perceived social support, satisfaction with online learning, and coping strategies among working mothers in Jordan during the COVID-19 pandemic.

Second, this study examines how perceived stress, perceived social support, satisfaction with online learning correlate to coping strategies.

METHODOLOGY

Participants and Procedures

This study utilized an online survey design to analyze the working mothers' perceived stress, perceived social support, satisfaction with children's online learning, and coping strategies during the COVID-19 outbreak. This study used four instruments; Perceived Stress Scale (PSS), Multidimensional Scale of Perceived Social Support (MSPSS), Brief Coping Orientation to Problems Experienced (B-COPE) Inventory, and Distance Learning Satisfaction Scale (DLSAT). In addition, the target population included all working mothers. In the present study, a simple random sample was selected. Seven elementary and high schools were chosen to distribute the survey for the working mothers of students. Mothers' groups on social media, schools, hospitals, and other government institutions were identified before forwarding the survey link to them. A consent form was sent, and participation was voluntary. In total, 204 working mothers participated in the survey.

Instrumentation

The cross-sectional survey consisted of the following instruments:

Perceived Stress Scale (PSS)

This scale is a self-reported psychological tool that measures the individual's perception of the degree of stress experienced [20]. It consists of 14 items (seven positive and seven negative), on a five-point Likert scale ranging from zero = never to four = always. The total score ranges from zero to 56, whereby higher scores indicate a greater stress perception level. It is noteworthy to mention that several studies have reported PSS as psychometrically sound. The coefficient alpha reliability, α , was high at 0.85, and the test-retest correlation was 0.90. Thus, the PSS showed an adequate degree of concurrent validity (Cohen et al., 1983). This study utilized the Arabic version of the PSS that is proven to have good psychometric properties. Besides, the internal consistency reliability of the PSS-Arabic in a previous study was high ($\alpha = 0.80$), exploratory factor analysis (EFA) found two components with eigenvalues greater than 1.0 (45.0% of variance), whereas Cronbach's alpha coefficients values were 0.74 (Factor 1), 0.77 (Factor 2) (Almadi et al., 2012). In this study, the internal consistency was calculated, and the Cronbach's alpha coefficient value of 0.933 indicated an excellent internal consistency for the study sample of working mothers.

Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS is a widely applied tool to estimate the perception of individuals' social support from three primary sources: family, friends, and significant others across various cultures. It consists of a 12-item questionnaire on a seven-point Likert scale ranging from one = very strongly disagree to seven = very strongly agree. Past studies have revealed that the MSPSS displayed adequate psychometric properties. The alpha value for the total score and its subscales was good, internal consistency of the Arabic version of the MSPSS was reported as $\alpha = .87$). Meanwhile, the divergent validity of MSPSS was supported through its negative correlation with the General Health Questionnaire.

Furthermore, the coefficient alphas of the entire instrument and its three subscales ranging from 0.85 to 0.91 indicated good internal consistency, and the test-retest scores between 0.72 to 0.85 indicated good stability. The concurrent validity is also confirmed through a positive correlation between the Lubben Social Network Scale and MSPSS (Zimet et al., 1988; Zimet et al., 1990). In this current study, the researcher used the MSPSS to measure the perceived social support level among working mothers. The Arabic version of MSPSS was reported to be psychometrically sound, thus making it a reliable and culturally valid scale to assess the perceived social support in the Arabic population.

Brief Coping Orientation to Problems Experienced (B-COPE) Inventory

This inventory is a self-reported measure used to determine an individual's coping strategies to manage stressful situations in their lives. This scale consists of 14 domains with 28 items. All items are scored on a four-point Likert scale

ranging from “one = I have not been doing this at all” to “four = I have been doing this a lot.” The original scale showed good internal inconsistency ($\alpha = 0.83$) [30]. The 14 subscales showed good internal consistency ($\alpha \geq 0.60$) except three of them venting ($\alpha = 0.53, 0.58, 0.17, \text{ and } 0.51$ respectively) (Nitzburg et al, 2016). Furthermore, the Arabic version of the B-COPE Inventory demonstrated good psychometric properties. Furthermore, the confirmatory factor analysis showed an acceptable domain structure, and the test-retest reliability was significant at 0.8. The current study presented a Cronbach’s alpha of 0.85, indicating acceptable internal reliability [31] [33].

Online Learning Satisfaction Scale (DLSAT)

This scale is a self-reported scale consisting of ten items scored on a five-point Likert scale (one = strongly disagree to five = strongly agree) (Gunawardena & Zittle, 1997) used to rate students' satisfaction towards their online learning experience. In this study, the researcher adopted Cobb’s version (Cobbm, 2009) that comprises nine items. The minimum and maximum possible scores for the items are nine and 45, respectively. A higher score signifies a higher satisfaction level. Additionally, no adjustments to the scale were made. In this particular study, the working mothers were asked to rate their satisfaction with their children's online learning. The original scale presented an acceptable reliability alpha value of 0.78 for the entire scale. In the current study, the DLSAT showed a high-reliability coefficient with $\alpha = 0.92$.

Data Analysis

In this particular study, the Statistical Package for the Social Sciences (SPSS) version 21.0 was used in the data analysis. Additionally, the mean, standard deviation, and Cronbach’s alpha values of all variables were described using descriptive statistics. Subsequently, Pearson's correlation coefficients were computed using the bivariate correlations to determine the correlation degree between PSS, MSPSS, DLSAT, and B-COPE. Lastly, the internal consistency for the entire scale was evaluated by calculating the Cronbach’s alpha coefficient.

RESULTS AND DISCUSSION

Demographic Profile of Participants

A total of 204 mothers participated in the cross-sectional online survey, ranging from 27 to 49 years old ($M = 35.38, SD = 5.18$) (Figure 1).

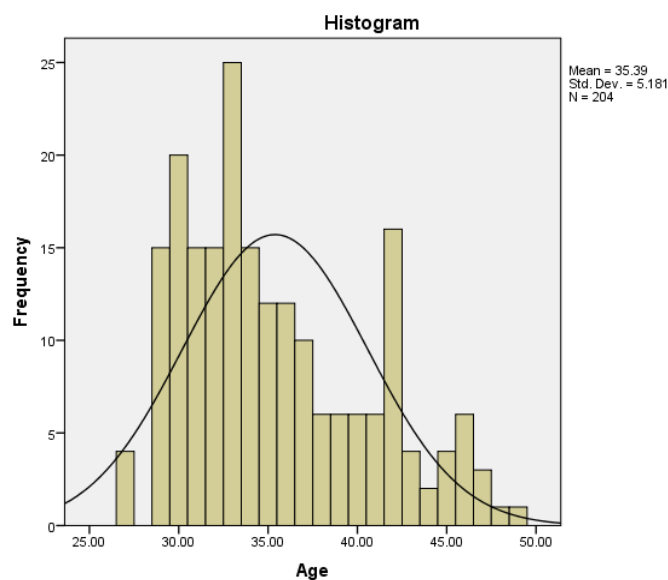


Figure 1: Participants’ Age Range

All participants in this study had at least one child with an average of three children. The majority (53.4%, $n = 109$) of the participants worked in the education sector, followed by the health sector (28.9 %, $n = 59$), government services (1.96%, $n = 4$), engineering and private business sector (7.84%, $n = 16$) (Figure 2).

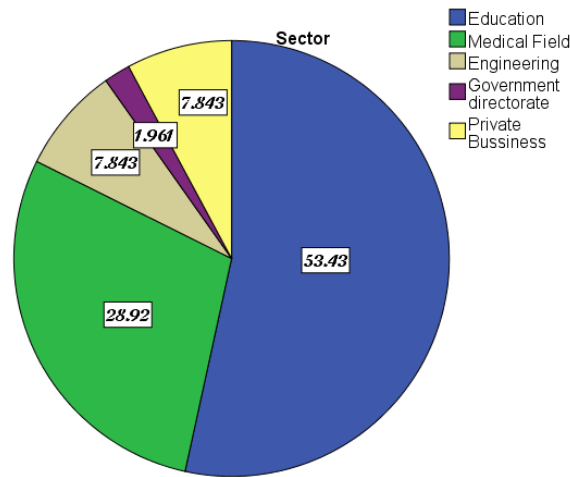


Figure 2: Background of Participants

Regarding marital status, most of the participants were married (95.12%, n = 195), whereas 4.39% (n = 9) were divorced (Figure 3). In addition, more than half of the participants (55.6%) earned moderate income, while one-quarter (24.4%) of them were of low income. Only 19.5% of them claimed to earn a high income.

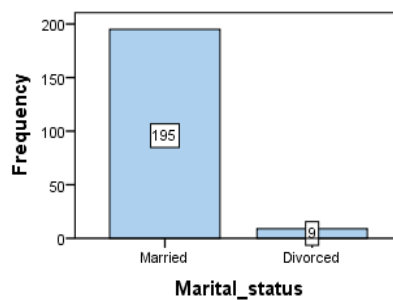


Figure 3: Marital Status

Table 1 clarifies the means and standard deviations of participants’ score on study variables.

Table 1: description of Means, Standard Deviations of Sample

Variable	<i>M</i>	<i>SD</i>
Perceived stress (PSS)	44.15	7.25
Perceived Social Support (MSPSS)	29.87	9.41
Distance Learning Satisfaction (DLSAT)	17.50	6.60
Coping Strategies (B-COPE)	60.56	11.07

Results related to the first study objective

The First objective of this study is to investigate perceived stress, perceived social support, satisfaction with online learning, and coping strategies among working mothers in Jordan during the COVID-19 pandemic. The means and standard deviations for the measures of perceived stress, perceived social support, satisfaction with online learning, and coping strategies across working sectors (n = 204) are shown in Table 2.

Table 2: Means and Standard Deviations across Working Sectors

Sector		M	SD
Education N = 109	PSS	47.53	5.27
	MSPSS	28.33	9.02
	DLSAT	16.43	5.14
	B-COPE	59.46	10.81
Medical Field N = 59	PSS	43.18	4.67
	MSPSS	30.15	8.32
	DLSAT	16.33	4.75
	B-COPE	60.20	9.39
Engineering N = 16	PSS	35.25	7.83
	MSPSS	31.18	10.77
	DLSAT	21.81	8.447
	B-COPE	62.31	13.641
Government directorate N = 4	PSS	38.25	6.34
	MSPSS	37.50	11.90
	DLSAT	15.25	3.09
	B-COPE	68.75	6.50
Private Business N = 16	PSS	35.06	9.46
	MSPSS	36.12	11.08
	DLSAT	25.3750	11.78629
	B-COPE	65.5625	14.98430

Stress among working mothers is expected from their multiple and simultaneous roles. On the other hand, some of them could manage and balance between working and family life, resulting in lesser stress, whereas others cannot. The COVID-19 pandemic adds to their workload, specifically for those in the education and health sectors.

The perceived stress levels among working mothers are vital as they correlate with mental health. The findings in previous studies revealed that by enhancing their self-efficacy, the perceived capabilities of working mothers in coping with the stressors in their lives could be improved

(Brown et al., 2020; Earls et al., 2008; Lau). In this present pandemic, the state of working mothers' mental health is worrying. They must cope with numerous issues and confront multiple stressors due to countless responsibilities. Moreover, working mothers are expected to be skilled workers in their jobs and childcare experts at home. These high expectations become significant stressors for working mothers, causing anxiety and stress. Due to this fact, they require help and support, specifically from their partners and families, to share the workload and responsibilities. Hence, future studies should highlight more on the strategies and improvement of self-efficacy to promote working mothers' psychological well-being. This study should also be extended to explore other demographic variables in different populations and cultures.

Results related to the second study objective

The Second objective of this study is to examine how perceived stress, perceived social support, and satisfaction with online learning correlate to coping strategies.

Working Mothers and Perceived Stress

The COVID-19 pandemic has disrupted various aspects of people's lives. Hence, this study analyzed the relationship between perceived stress, perceived social support, satisfaction with children's online learning, and coping strategies among working mothers. The findings revealed that working mothers experienced a high level of stressors due to the outbreak. These outcomes are parallel with previous studies that investigated the impact of global health crises on people's well-being

(Savitsky et al., 2020). (Brown et al., 2020; Earls et al., 2008; Lau et al., 2008).

An interesting finding is that mothers working in the education and health sectors had a greater stress level. Individuals in health sector perceive themselves to be at higher risk of infection. Previous research showed similar results (Savitsky et al., 2020) Their PSS scores significantly correlated with their DLSAT. Similarly, mothers in these two sectors were reported with the lowest scores of coping strategies than mothers working in other fields such as engineering, government services, and private business (Table 1). Notably, a significant degree of perceived stress due to the COVID-19 pandemic is considered a risk factor of deteriorating mental health among mothers.

Working Mothers and Perceived Social Support

Past literature has proven a significant relationship between individual mental health and social support. In this study, perceived social support has a significant impact on working mothers involved in this particular study. Thus, positive support could produce better psychological functioning besides being a buffer against emerging mental health problems (De Silva et al., 2005; Grey et al., 2020). Moreover, it is suggested that a higher degree of social support could enhance an individual's resilience rate when handling stress (Grey et al., 2020).

This study discovered that perceived social support has a significant negative correlation with perceived stress. Furthermore, a positive correlation was also detected between MSPSS, coping strategies, and satisfaction with online learning. Despite gaining family and social support, most working mothers still constantly experience perceived stress. Therefore, the social support perception is a crucial indicator of an individual's psychological functioning during the COVID-19 pandemic. In particular, it is recommended to practice a flexible work environment and efficient social support to reduce working mothers' stress levels.

During the COVID-19 pandemic, working mothers experience high distress while managing multiple roles. Thus, social support in any form they could obtain is required. In general, perceived social support can be acquired from a spouse, family, and friends. The three sources of perceived social support have specific relationships with psychological health aspects, such as depression, tension, fatigue, irritability, and well-being (De Silva et al., 2005; Grey et al., 2020). In this current study, the findings revealed that perceived social support is strongly related to spouse and moderately related to family support. Surprisingly, studies showed that friends' support is not related to the variables of working mothers' psychological well-being.

Working Mothers and Online Learning Satisfaction

In this study, the mothers had expressed their concerns about the whole experience of online learning. Notably, they responded negatively concerning the children's motivation, the value of online discussion, and the curriculum's suitability to be taught remotely. The DLSAT results revealed that most mothers were dissatisfied with the level of effort and work assigned to their children. The working mothers' scores also showed a significant inverse correlation with their perceived stress rate ($r = -.587^{**}$). The summary of intercorrelations, means, standard deviations, and Cronbach's alphas for all constructs, with the dependent variable ($n = 204$) are shown in Table 3 below.

Table 3: Summary of Intercorrelations, Means, Standard Deviations and Cronbach's Alpha

Variable	PSS	MSPSS	DLSAT	B-COPE	<i>M</i>	<i>SD</i>	(α)
Perceived stress (PSS)	--	-.389**	-.587**	-.314**	44.15	7.25	.93
Perceived Social Support (MSPSS)	--	--	.265**	.155**	29.87	9.41	.93
Distance Learning Satisfaction (DLSAT)	--	--	--	.280**	17.50	6.60	.92
Coping Strategies (B-COPE)	--	--	--	--	60.56	11.07	.85

** $p < 0.01$

In the Arabic culture, mothers tend to be responsible for monitoring their children's education. In these trying times, notably the COVID-19 pandemic, many working mothers face a growing challenge in balancing their responsibilities and their children's motivation and self-efficacy towards online learning. This result is like what Lee et al., (2020), which found that parents' satisfaction of online learning is qualified by the children's competence. The overall learning outcomes also

depend highly on the accessibility of the online learning system. All these demands add extra burden on the mothers, and other strategies are needed for them to cope with these types of stress. The results in this study also confirmed a recently published study's finding that highlighted the parents' struggles due to school closure during the COVID-19 pandemic (Garbe et al., 2020).

Working mothers also have trouble in understanding interactive online learning. The findings of past studies described that one of the significant predictors of online learning satisfaction is the interaction and understanding of online learning (Cobb et al., 2009; Garbe et al., 2020). Most importantly, it was revealed that interaction is the main ingredient of a successful online learning program. Unlike the traditional classroom, online interaction in online learning must be more interactive using different media and pedagogical platforms. Hence, a mother's understanding of using web-based media will determine their satisfaction in the online learning experiences.

On the other hand, there is also a complex relationship between working mothers' involvement in their children's education in a low-income family. This dilemma between working and family involvement could cause a lack of understanding of how to engage effectively in an online learning environment. It is an interesting area to research further and provide recommendations for online collaborative skills among working professionals, especially working mothers.

Working Mothers and Coping Strategies

COVID-19 continues to spread and affect everybody's daily lives, specifically women and mothers worldwide. Thus, cultivating effective coping methods (e.g., acceptance and seeking support) is inevitable as they are correlated with better psychological and mental health than other maladjustment methods such as self-blame and denial (Rettie & Daniels, 2020). Regarding the participants' coping skills in this study, the working mothers recorded a mean score of 60.65 ($SD = 10.21$) within the range of 28 to 90. This data indicates a moderate level of ability to handle stress from the COVID-19 pandemic effectively. There was also a statistically significant relationship between the working mothers' coping strategies and all the study variables (PSS, MSPSS, and DLSAT).

Therefore, the effective usage of coping strategies may assist individuals in handling stressful life events particularly when its demands exceed individual resources (Babore et al., 2020). The use of coping strategies was found to be related with lower levels of stress (Yin, Huang, and Lv, 2018; Martínez et al., 2020). As shown in Table 1, mothers in the educational and medical fields displayed a significantly lower mean score of B-COPE than mothers from different fields. Nevertheless, the results in this study contradict recent studies on the coping patterns of women during COVID-19, whereby the majority of the working mothers used avoidance instead of problem-focused coping strategies (Rodriguez, Litt, & Stewart, 2020).

On another note, various media can be utilized to promote healthy behaviors. For instance, online counseling services can be provided to mothers, women, or other society members during the COVID-19 pandemic to protect an individual's mental health during the crisis (Kumar & Somani, 2020). In summary, coping strategies represent personal efforts in managing stressful life situations, and thus, an individual's circumstances are the pivotal factor in ensuring their adjustment.

IMPLICATIONS AND RECOMMENDATIONS

Based on the above results and discussions, working mothers are among the most vulnerable groups in the COVID-19 pandemic. Their high-stress level could influence their physical and mental well-being. In light of this study, relevant health care practitioners such as counselors, social workers, and mental health professionals must prioritize working mothers' needs besides helping them find alternative channels of care for support. Besides, helplines or online consultations can aid in emergency requests. Nevertheless, it is equally crucial to increase awareness about effective coping strategies and to educate people about common psychological consequences in such difficult situations.

Alternative care channels are crucial to support working mothers in managing multiple workloads and responsibilities. Most significantly, the findings of this study suggested focusing more on mothers who work in the education and health sectors since they experience a greater level of stress compared to working mothers in other fields of works. Hence, practitioners and professionals should develop a plan to arrange online programs related to stress management during the pandemic era.

Concurrently, stakeholders in the education field should establish an elaborate plan to organize the online learning process as much as possible. Additionally, teachers and school counselors should intensify their efforts to identify and assist families struggling with online learning. Supporting students to take responsibilities and triggering their motivation to learn via effective communication could reduce the stressors on their mothers.

LIMITATIONS

The limitations in this study include the working mothers who participated in the online survey via social media, which might not present a sample representative of the overall population. For instance, working mothers without access to the Internet or social media applications at the time of this study would not be able to participate. Secondly, although the sample size was statistically significant, it is still relatively small. In other words, the generalizability of this study's findings is only limited to working mothers with similar criteria from similar geographical areas in Jordan. Thirdly, since the current study's constructs were measured naturally without manipulation, the internal validity was low. Lastly, even though all the instruments used in this study were psychometrically valid, they were not tested on women or working mothers before.

CONCLUSION

The findings of this study support the idea that the current pandemic harms on all segments of society. This study selected working mothers due to their numerous social roles. Working mothers experience significant levels of psychological stress due to their workload. Since the end of this pandemic is still questionable, working mothers' mental health remains vulnerable to various negative impacts. This situation could prevent them from applying adaptive strategies that could temporarily help them perform their roles.

This study posits a critical question, "Who are the biggest losers in the COVID-19 pandemic?" The findings revealed sound judgment and interpretation that working mothers are in the most vulnerable groups facing the pandemic. Variables on perceived stress indicated that working mothers have high-stress levels, particularly those working in the education and health sectors. On the other hand, other variables of perceived social support, online learning satisfaction, and coping strategies highlighted positive results for working mothers. This result indicates that working mothers adapt and cope well with the current situation as long as they receive the necessary support from their spouse, family, and friends and use coping strategies effectively.

Finally, the study shows that working mothers' mental health is worrying and needs dedication to action. Governments and decision-makers should collaborate to establish an efficient financial and psychological system to support those (Al-Nasa'h et al., 2021; AL-Tarawneh et al., 2021). Therefore, the current study is crucial to identify the effects of COVID-19 on working mothers and propose effective coping strategies to help their well-being. Hence, online psychological counseling services are offered to decrease stress level among working mothers. Further research should provide effective long-run coping strategies, which are required and significantly needed.

References

- Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51.
- Alghamdi, M. (2020). Cross-cultural validation and psychometric properties of the Arabic Brief COPE in Saudi population. *Med J Malaysia*, 75(5), 502-509.
- Almadi, T. C. (2012). An Arabic version of the Perceived Stress Scale: Translation and validation study. *International Journal of Nursing Studies*, 49(1), 84-89.
- Al-Momani, H. (2017). The mediating effect of organizational commitment on the relationship between work-life balance and intention to leave: Evidence from working women in Jordan. *International Business Research*, 10(6), 164-177.
- Al-Nasa'h, M., & Asner-Self, K. (2019). Death and Factors of Adjustment Among Bereaved Parents. *Creative Business and Social Innovations for a Sustainable Future*, pp. 85-106. Retrieved from <https://doi.org/10.1007/978-3-11>
- Al-Nasa'h, M., Al-Tarawneh, L., Abu Awwad, FM., & Ahmad, I. (2021) Estimating students' online learning satisfaction during COVID-19: a discriminant analysis. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2021.e08544>
- Al-Tarawneh, L., Al-Nasa'h, M., Abu Awwad, FM. (2021). The Effect of the COVID-19 Pandemic among Undergraduate Engineering Students in Jordanian Universities: Factors Impact Students' Learning Satisfaction. In *Proceedings of the 2021 Innovation and New Trends in Engineering,, Science and Technology Education Conference*, 11-17. <https://doi.10.1109/IETSEC51476.2021.9440500>.
- Alturki, U. . (2022). Factors Affecting the Adoption and Use of E-Learning and Distance Education: A Comparative Study between Saudi and American Universities. *Dirasat: Educational Sciences*, 49(2), 295–315. <https://doi.org/10.35516/edu.v49i2.1040>
- Bani- Mustafa, M. S. ., & Al-Shiyab, S. M. . . (2020). The Effectiveness of Cognitive Behavioral Program in Reducing Psychological Stress among Female Teachers of Students with Special Needs in Jordan. *Dirasat: Educational Sciences*, 47(1), 94–107. Retrieved from <https://dsr.ju.edu.jo/djournals/index.php/Edu/article/view/1709>
- Bashir, K. (2019). Modeling E-Learning Interactivity, Learner Satisfaction and Continuance Learning Intention in Ugandan Higher Learning Institutions. *International Journal of Education and Development Using Information and Communication Technology*, 15(1).
- Billier, H. (1993). *Fathers and families: Paternal factors in child development*. Westport, CT: Auburn House.
- Bray, E., Aoki, K., & Dlugosh, L. (2008). Predictors of learning satisfaction in Japanese online distance learners. *International Review of Research in Open and Distributed Learning*, 9(3), 1-24.
- Brown, S. M., Doom, J. R., Lechuga-Pena, S., Watamura, S. E., & Koppels, T. (2020). Stress and Parenting during the Global COVID-19 Pandemic. *Child Abuse and Neglect*.
- Calarco, J. M., Anderson, E., Meanwell, E., & Knopf, A. (2020). “Let’s Not Pretend It’s Fun”: How COVID-19-Related School and Childcare Closures are Damaging Mothers’ Well-Being. SocArXiv. <https://doi.10.31235/osf.io/jyvk4>.
- Cardenas, R. A., Major, D. A., & Bernas, K. H. (2004). Exploring work and family distractions: Antecedents and outcomes. *International Journal of Stress Management*, 11(4), 346.
- Chen, T., Peng, L., Yin, X., Rong, J., Yang, J. & Cong, G. (2020). Analysis of user satisfaction with online education platforms in China during the COVID-19 pandemic. *Healthcare*, 8(3), 1-26. <https://doi.org/10.3390/healthcare8030200>
- Cobb, S. (2009). Social presence and online learning: A current view from a research perspective. *Journal of Interactive Online Learning*, 8(3), 241-254.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24,385-396.
- Collins, C. (2009). Making motherhood work: How women manage careers and caregiving. *Princeton, NJ: Princeton University Press*.
- Collins, C., Landivar, L. C., Ruppanner, L., & Scarborough, W. J. (2021). COVID-19 and the gender gap in work hours. *Gender, Work & Organization*, 28, 101-112.

- De Silva, M. J., McKenzie, K., Harpham, T., & Huttly, S. R. (2005). Social capital and mental illness: a systematic review. *Journal of epidemiology & community health, 59*(8), 619-627.
- Dow, D. (2019). *Mothering while black: Boundaries and burdens of middle-class parenthood. California, CA: University of California Press.*
- Earls, F., Raviola, G. J., & Carlson, M. (2008). Promoting child and adolescent mental health in the context of the HIV/AIDS pandemic with a focus on sub-Saharan Africa. *Journal of Child Psychology and Psychiatry, 49*(3), 295-312.
- Erdwins, C. J., Buffardi, L. C., Casper, W. J., & O'Brien, A. S. (2001). The relationship of women's role strain to social support, role satisfaction, and self-efficacy. *Family relations, 50*(3), 230-238.
- ESCWA, U. N. (2020). New ESCWA brief: 8.3 million people will fall into poverty in the Arab region due to COVID-19. Retrieved from <https://www.unescwa.org/news/new-escwa-brief-83-million-people-will-fall-poverty-arabregion-due-covid-19>.
- Fisher, J., Languilaire, J. C., Lawthom, R., Nieuwenhuis, R., Petts, R. J., Runswick-Cole, K., & Yerkes, M. A. (2020). Community, work, and family in times of COVID-19. *Community, Work & Family, 23*(3), 247-252.
- Flood, S., Meier, A., & Musick, K. (2020). Reassessing Parents' Leisure Quality With Direct Measures of Well-Being: Do Children Detract From Parents' Down Time?. *Journal of Marriage and Family, 82*(4), 1326-1339.
- Garbe, A. O. (2020). Parents' Experiences with Remote Education during COVID-19 School Closures. *American Journal of Qualitative Research, 4*(3), 45-65.
- Gerhold, L. (2020). COVID-19: Risk perception and coping strategies. *PsyArXiv*. Retrieved from <https://doi.org/10.31234/osf.io/xmpk4>
- Grey, I., Arora, T., Thomas, J., Saneh, A., Tohme, P., & Abi-Habib, R. (2020). The role of perceived social support on depression and sleep during the COVID-19 pandemic. *Psychiatry research, 293*, 113452.
- Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *American journal of distance education, 11*(3), 8-26.
- Hamdan-Mansour, A. M., Al Badawi, T., Haourani, E., & Marmash, L. R. (2013). Depression, psychological distress and coping skills among patients diagnosed with type-II Diabetes Mellitus. *Life Sci J, 10*(4), 3044-48.
- Hansen, Å. M., Blangsted, A. K., Hansen, E. A., Sjøgaard, K., & Sjøgaard, G. (2010). Physical activity, job demand-control, perceived stress-energy, and salivary cortisol in white-collar workers. *International Archives of Occupational and Environmental Health, 83*(2), 143-153.
- Hewitt, P. L., Flett, G. L., & Mosher, S. W. (1992). The Perceived Stress Scale: Factor structure and relation to depression symptoms in a psychiatric sample. *Journal of psychopathology and Behavioral Assessment, 14*(3), 247-257.
- Huang, L. L. (2020). Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak: A comparative study. *PloS One, 15*(8), 237-303.
- Kumar, A., & Somani, A. (2020). Dealing with Corona virus anxiety and OCD. *Asian Journal of Psychiatry, 51*, 102053.
- Lau, A. L., Chi, I., Cummins, R. A., Lee, T. M., Chou, K. L., & Chung, L. W. (2008). The SARS (Severe Acute Respiratory Syndrome) pandemic in Hong Kong: Effects on the subjective wellbeing of elderly and younger people. *Aging and mental health, 12*(6), 746-760.
- Milkie, M. A., Nomaguchi, K., & Schieman, S. (2019). Time deficits with children: The link to parents' mental and physical health. *Society and Mental Health, 9*(3), 277-295.
- Mrklas, K., Shalaby, R., Hrabok, M., Gusnowski, A., Vuong, W., Surood, S., ... & Agyapong, V. I. O. (2020). Prevalence of perceived stress, anxiety, depression, and obsessive-compulsive symptoms in health care workers and other workers in Alberta during the COVID-19 pandemic: cross-sectional survey. *JMIR Mental Health, 7*(9), e22408.
- Mtebe, J. S., & Raisamo, R. (2014). A Model for Assessing Learning Management System Success in Higher Education in Sub-Saharan Countries. *The Electronic Journal of Information Systems in Developing Countries, 61*(1), 1-17.
- Nitzburg, G. C., Russo, M., Cuesta-Diaz, A., Ospina, L., Shanahan, M., Perez-Rodriguez, M., ... & Burdick, K. E. (2016). Coping strategies and real-world functioning in bipolar disorder. *Journal of affective disorders, 198*, 185-188.

- Noor, N. (2004). Work-family conflict, work-and family-role salience, and women's well-being. *The Journal of Social Psychology*, 144(4), 389-406.
- Olaimat, F. ., Almanajrah, M. ., Jwaniatt, M. ., & Rawabdeh, M. . (2022). How Effective is Distance Learning from the Viewpoint of Students of School of Mass Communication from Yarmouk University in Light of the Corona Crisis and its Developments. *Dirasat: Educational Sciences*, 49(2), 258–271. <https://doi.org/10.35516/edu.v49i2.1032>
- Ramos, H. M., Francis, F., & Philipp, R. V. (2015). Work life balance and quality of life among employees in Malaysia. *International Journal of Happiness and Development*, 2(1), 38-51.
- Rettie, H., & Daniels, J. (2021). Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic. *American Psychologist*, 76(3), 427.
- Rodriguez, L. M., Litt, D. M., & Stewart, S. H. (2020). Drinking to cope with the pandemic: The unique associations of COVID-19-related perceived threat and psychological distress to drinking behaviors in American men anFyasd women. *Addictive behaviors*, 110, 106532.
- Saltzman, L. Y., Hansel, T. C., & Bordnick, P. S. (2020). Loneliness, isolation, and social support factors in post-COVID-19 mental health. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S55.
- Shahroury, F. R., Al-Tarawneh, L., & Al-Zoubi, A. (2022, March). In-the-Online-Class Remote Lab in Post COVID-19 Pandemic. In 2022 *IEEE Global Engineering Education Conference (EDUCON)* (pp. 677-682). IEEE. <https://doi.10.1109/EDUCON52537.2022.9766794>.
- Shawaqfeh, S. . (2022). Online Learning during the COVID-19 Crisis from the Perspective of Students of Agricultural Sciences. *Dirasat: Educational Sciences*, 49(1), 424–433. <https://doi.org/10.35516/edu.v49i1.734>
- Stone, H. W., Cross, D. R., Purvis, K. B., & Young, M. J. (2003). A study of the benefit of social and religious support on church members during times of crisis. *Pastoral Psychology*, 51(4), 327-340.
- USAID. (2021). Jordan: Country Development Cooperation Strategy (CDCS). Retrieved from <https://www.usaid.gov/sites/default/files/documents/CDCS-Jordan-2020-2025.pdf>
- Yasin, A., Al-Tarawneh, L., El-Issa, F., & Al-Zoubi, A. (2022). Students' achievement in an online course on technical writing and communication skills. *Interactive Technology and Smart Education*, (ahead-of-print). <https://doi/10.1108/ITSE-05-2022-0057/full/html>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41.
- Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the multidimensional scale of perceived social support. *Journal of Personality Assessment*, 55(3-4), 610- 617.