Prediction Ability of Coping Strategies in Fear of Coronavirus and Post-Traumatic Stress Disorder (PTSD) among Frontline Workers during Coronavirus Pandemic

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Abstract

Objective: To investigate the prediction ability of the coping strategies in fear of Coronavirus and post-traumatic stress disorder (PTSD) among frontline workers during coronavirus pandemic.

Methods: The participants were 408 volunteer frontline workers who filled out online self-report measures of brief coping, fear of coronavirus, and post-traumatic stress disorder.

Results: It shows that coping strategies predicted 28.8% of the variance in fear of Coronavirus and 34.6% of the variance in post-traumatic stress disorder. The most prominent coping strategies are substance abuse then religion. Moreover, there are low levels of fear of Coronavirus and post-traumatic stress disorderamong frontline workers during coronavirus pandemic

Conclusion: Coping strategies play a vital role in developing fear of coronavirus and post-traumatic stress disorder.

Keywords: Coping Strategies, Fear of Coronavirus, Post Traumatic Stress Disorder (PTSD), Frontline Workers.

القدرة التنبؤية لاستراتيجيات التكيف بالخوف من فيروس كورونا واضطراب ما بعد الصدمة لدى العاملين في الخطوط الأمامية خلال جائحة كورونا

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ملخص

الهدف: فحص القدرة التنبؤية لاستراتيجيات التكيف بالخوف من فيروس كورونا واضطراب ما بعد الصدمة لدى العاملين في الخطوط الأمامية خلال جائحة كورونا.

الأساليب: تكونت عينة الدراسة من 408 من العاملين بالخطوط الأمامية الذين تطوعوا للمشاركة بالدراسة حيث قاموا بالاستجابة الالكترونية لثلاث مقاييس للتقرير الذاتي وهي مقياس التكيف المختصر ومقياس الخوف من فيروس كورونا ومقياس اضطراب ما بعد الصدمة.

النتائج: أشارت نتائج الدراسة إلى استراتيجيات التكيف قد تنبأت ب 28.8% من التغير بالخوف من فيروس كورونا وتنبأت أيضاً ب 34.6% من التغير باضطراب ما بعد الصدمة. كما أشارت النتائج إلى أن أكثر استراتيجية للتكيف بين أفراد الدراسة هي إساءة استخدام المواد ثم الدين. وأشارت أيضا إلى المستويات المنخفضة من الخوف من فيروس كورونا واضطراب ما بعد الصدمة لدى العاملين في الخطوط الامامية خلال جائحة كورنا.

الاستنتاج: تلعب استراتيجيات التكيف دوراً مهماً في تطوير الخوف من فيروس كورونا واضطراب ما بعد الصدمة.

الكلمات الدالة: استراتيجيات التكيف،الخوف من فيروس كورونا، اضطراب ما بعد الصدمة، العاملين بالخطوط الأمامية.

Introduction:

Coping strategies are vital for everyone to deal with problematic and stressful situations, like Coronavirus COVID-19 pandemic, and it may affect individuals' mental health. To some extent, individuals may develop mental ill-health indicators such as fear of Coronavirus COVID-19 and post-traumatic stress disorder (henceforth, PTSD). However, these indicators may be strongly found among frontline workers, and they are well studied, both alone as well as in their inter-relationship with coping strategies in America and Europe (Albott et al., 2020; Boyraz & Legros, 2020; Xiao, Luo, & Xiao, 2020). Disappointedly, they are not investigated among frontline workers within Jordanian context.

In Jordan, approximately 905738 confirmed cases of COVID-19 and 11310 deaths have been reported so far (https://corona.moh.gov.jo/ar). These high numbers have serious challenges that may put most developing countries, one of which is Jordan, in a critical situation due to its limited resources (Poudel & Subedi, 2020), especially on frontline workers who deal directly with under-question cases (Secer ,Ulas, & Karaman-Ozlu, 2020).

COVID-19 pandemic presents unique stress factors, especially to frontline workers, health care, and Civil Defense workers (Coelho et al., 2020; Secer, Ulas, & Karaman-Ozlu, 2020). These stress factors include the uncertainty about the duration of the pandemic, its impact on individuals' life, and its potential risks to ones' own health and their relatives. Those stressors can create intense fear and other mental ill-health indicators in a short time and may last for a long time (Albott, et al., 2020; Boyraz & Legros, 2020; Xiao, Luo, & Xiao, 2020).

Torales et al. (2020) found, in their study, that this pandemic may lead to further mental ill-health indicators, such as stress, depression denial, and global fear, it and will influence daily life in all sectors, which in turn can weaken control and coping strategies.

Coping Strategies:

It has been indicated that the ability to cope with difficulties like COVID-19 pandemic may affect mental ill-health indicators (Secer, Ulas, & Karaman-Ozlu, 2020). Shechter et al. (2020) found that the most common source of high distress among health care workers is perceiving lack of control. Furthermore, they found that healthcare workers use empirically-

supported coping behaviors, but they also reported interest in additional wellness resources.

Carmassi et al. (2020) reviewed studies related to other virus diseases outbreak concerning the risk and coping factors for PTSD among healthcare workers. The results show that some factors regarded as risk and coping factors at the same time include exposure level, working role, years of work experience, social and work support, job organization, age, gender, and coping styles. In the same line, Brooks et al. (2018) found that there are multiple protective factors that play crucial roles in developing mental ill-health indicators, including training, perceived competence, social support, and effective coping strategy. Furthermore, coping strategies among frontline workers during COVID-19 pandemic were reviewed by Heath et al. (2020), which involve self-care strategies and strategies that depend on organizational justice, like reducing their work-load.

Coping strategies are classified into three different types: task- oriented, emotion-oriented, and avoidance-oriented strategies, and they all aim to manage individuals' reactions to stressors and difficulties. Task-oriented strategies (i.e. action planning, problem solving, and positive reappraisal) focus on direct solutions, which are correlated with adaptive psychological well-being, sense of control, and self-efficacy. Emotion-oriented strategies focus on regulating one's emotional state (e.g., emotional disclosure, seeking social-emotional support). In the cases of lack of constructive emotional regulation, emotion-oriented strategies can take the form of increased use of negative emotions (e.g., rumination, suppression, self-blame). The third coping strategy is avoidance-oriented, which is concerned with the denial or distortion of stressful situations, such as self- distractions, and substance use, among others (Smith et al., 2016).

Literature reviews revealed that the sense of control over the stressors or unpredictable situations such as COVID-19 pandemic and the confidence in one's coping resources may increase the use of task-oriented strategies. In contrast, lack of perceived coping resources and feelings of powerlessness would promote greater use of emotion-oriented and avoidance-oriented strategies. These strategies may be of short-term help to the individual for a short, but not in the long run (Smith et al., 2016).

Mental Ill-Health Indicators:

Frontline workers, who serve during the COVID-19 pandemic, are at high risk of developing many mental ill-health indicators, particularly fear of infection of COVID-19 and PTSD (Xiao et al., 2020). Hence, there is an urgent need to investigate mental ill-health consequences among them (Kang et al., 2020; Holmes et al., 2020; Poudel & Subedi, 2020; Zhang et al., 2020).

Fear of COVID-19

Frontline workers' duties are to identify the persons who are infected, respond to their treatment needs, and refer severe cases to hospitals. This may put them at the risk of developing fear of COVID-19, in addition to the possibility of getting infected by this disease at any time (Secer, Ulas, & Karaman-Ozlu, 2020).

Amin (2020) conducted a study to examine the impacts of COVID-19 on health care professionals' psychological well-being. The results indicated the presence of corona phobia among many of them, which in turn leads to multiple mental ill-health symptoms. Moreover, Huang et al. (2020) investigated mental health among clinical first-line medical staff and found that about 23.04% of them suffer from severe anxiety, especially among female medical staff.

Fear is a defensive mechanism against engaging in dangerous situations, which in its minimum degrees help us to survive and protect ourselves against threating situations. However, intense degrees of fear can lead to psychopathology. The results of limited studies show that fear of COVID-19 leads to extreme emotional and behavioral consequences, like anxiety disorders, suicide, and PTSD (Secer, Ulas, & Karaman-Ozlu, 2020).

Post-Traumatic Stress Disorders (PTSD)

PTSD is a common and expected mental ill-health indicator caused by major psychological trauma, like witnessing physical suffering and death related to COVID-19 pandemic (Albott et al., 2020; Boyraz & Legros, 2020).

The main symptoms of PTSD, as defined by the Diagnostic and Statistics of Mental Disorders in the fifth edition (DSM-5, 2013) of the American Psychiatric Association, include persistent intrusion symptoms, persistent avoidance of stimuli, negative alterations in cognition or mood, and marked alterations in arousal and reactivity. These high rates of PTSD

are found among frontline workers may be due to dealing with large numbers of critically ill patients, high mortality rates, and lack of effective treatment (Albott et al., 2020; Boyraz & Legros, 2020; Shechter et al., 2020).

Some studies are conducted to investigate the relationships between coping strategies and mental ill-health during COVID-19 pandemic; Secer, Ulas, & Karaman-Ozlu (2020) conducted a study to investigate the impact of COVID-19 on 370 healthcare professionals in Turkey on psychological adjustments skills. The results showed that the fear of COVID-19 has a negative effect on the psychological adjustment. It was found that psychological resilience has a protective function that limits this effect. Moreover, Lotzin et al. (2020) conducted conducted a study in Austria, Croatia, Georgia, Germany, Italy, Lithuania, Netherlands, Poland, Portugal, and Sweden to investigate the relationship between mental ill- health indicators and coping strategy. It was found that the mental ill-health indicators fear and PTSD correlate with coping strategies. Furthermore, Chew et al. (2020) conducted a study which aimed at exploring the changes in psychological responses (perceived stress, coping, PTSD) among healthcare workers. The results showed that using avoidance coping is associated with both perceived stress and PTSD.

Also, Callus et al. (2020) reviewed studies to identify the most effective stress reduction techniques for health care providers who treat patients infected with severe coronavirus (SARS, MERS COVID-19). The result showed that relaxation techniques were implemented on health care workers who take care of patients during severe COVID-19 pandemics. Also, Bhat et al. (2020), in their study, revealed that younger people, females living in urban conditions, and those who use maladaptive coping skills are more likely to have anxiety symptoms. In addition, liao et al. (2014) found in their study that anxiety and worry were strongly associated with coping. Moreover, Zhu et al. (2020) found that coping styles mediate the association between social support and anxiety among medical staff.

Our study is differing from previous study in many ways. First, it is conducted in the Jordanian context, which is rarely studied. Second,; it investigates the prediction ability of coping strategies in mental ill-health indicators, which is rarely investigated. Third, it investigates mediating variables with coping strategies, which is also rarely studied in the previous research.

Statement of the Problem:

Many frontline workers are at high risk of the infection of Coronavirus, and they might develop mental ill-health indicators, particularly fear of Coronavirus and Post-traumatic disorder. Literature reviews revealed that this depends on their coping strategies, which are rarely discussed and investigated in the Jordanian context (Secer ,Ulas, & Karaman-Ozlu, 2020).

In Jordan, approximately 905738 confirmed cases and 11310 deaths have been reported so far (https://corona.moh.gov.jo/ar). These high numbers have serious challenges that may put most developing countries, one of which is Jordan, in a critical situation due to its limited resources (Poudel & Subedi, 2020), especially for frontline workers who deal directly with the cases (Secer ,Ulas, & Karaman-Ozlu, 2020).

Furthermore, it has been indicated that the ability to cope with difficulties like coronavirus pandemic may affect mental ill-health indicators, like fear of coronavirus and PTSD (Secer, et al.,2020). Moreover, it has found that healthcare workers use empirically-supported coping behaviors, but they also reported interest in additional wellness resources (Shechter et al. 2020)

Moreover, literature reviews indicated that research on coping strategies of frontline workers during coronavirus pandemic are still limited (Heath, Sommerfield & Ungern-Sternberg, 2020).

Aims and Questions:

The current study aims at examining the prediction ability of coping strategies in fear of COVID-19 and PTSD among frontline workers. The study attempts to answer the following questions:

1. What are the most prominent coping strategies among frontline workers?
2. What are the levels of PTSD among frontline workers?
3. What are the levels of fear of coronavirus among frontline workers?
4. What is the prediction ability of coping strategies in PTSD among frontline workers?
5. What is the prediction ability of coping strategies in fear of coronavirus among frontline workers?

Research limitations:

This study has some limitations like the followings:

1. Temporal limitation: The study was conducted from March/2021 through

November/2021.

3. Spatial limitation: The study was run in the Jordanian context.

4. Human limitations: The study was intended for frontline workers.

Research Methodology:

Participants

The participants were randomly chosen during the course of this study over the period from September /2020 until the end of December/ 2020. The sample of the current study comprises 408 volunteer frontline workers in Jordan who are dealing with COVID cases (Ministry of Health, 54.5% and Civil Defense, 45.5%), (82.8% males, 17.2% female), (The age ranged between less than 25 and over 25 years), (Major: doctors 18.6%, nurses 21.6%, paramedic 33.3%, and other positions in their departments 26.5%). Participants filled out three online self-report measures.

Instruments

Fear of Coronavirus.

Fear of Coronavirus-19 is measured using the Fear of Coronavirus scale. It is widely used and has an adequate psychometric characteristic in its original version; it consists of 7 items and ($\propto$=82) (Ahorsu et al., 2020).

For the purpose of this study, fear of Coronavirus was translated into Arabic, then it was back-translated into its original language to ensure compatibility. After that, the scale was adjusted to suit the Jordanian environment. Psychometric characteristics of the Jordanian version were investigated as follows: 10 reviewers specializing in counseling, psychometric, and psychiatry provided their notes and recommendations on the Jordanian version in terms of items suitability. This version consisted of 7 items assessing fear of Coronavirus. The Items were rated using a 5-point Likert scale ranging from 'always' "5" to 'never' "1". Item discrimination validity for the Jordanian version of Fear of Coronavirus-19 scale was calculated; items' values ranged between (.63-.81). This indicates adequate item discrimination validity. In addition, Cronbach's alpha coefficient was ($\propto$=87). These values are statistically significant indicating that Fear of Coronavirus scale has adequate psychometric characteristics.

Short PTSD inventory:

PTSD was measured using Short PTSD inventory. It has an adequate psychometric characteristic. Short PTSD inventory assesses items from

DSM-IV PTSD clusters. The original version of the inventory included 8 symptoms, e.g., Recurrent thoughts or memories of the events) (Hansen et al., 2010).

For the purpose of the current study, PTSD was translated into Arabic language after receiving permission from the scale's correspondent developer. Then, it was back–translated into its original language to ensure consistency. The scale was then modified to be more appropriate to the Jordanian environment, and psychometric characteristics were derived for the scale. 10 reviewers specializing in counseling, psychometric and psychiatry provided their notes and recommendations on the Jordanian version considering item suitability. The Jordanian version consisted of 8 items. The respondent had to rate how likely he/she would agree or disagree with each statement on a 5-point Likert scale ranging from 1"Never" to 5 "Almost Always". Semantics validity of item Distinction for the Jordanian version of the scale was calculated; item values ranged between (0.54-0.88), which indicated an adequate item discrimination validity, and Cronbach's coefficient alpha was ($\propto$=85). These values are statistically significant. Hence, PTSD has adequate psychometric characteristics.

Brief Cope:

Coping was measured using Brief COPE scale. It has adequate psychometric characteristics (α=.68). The original version of the scale involved 28 statements, e.g., I've been refusing to believe that it has happened (Carver, 1997).

For the purpose of the current study; Brief COPE scale was translated into Arabic and then it was back–translated into its original language to ensure consistency. The scale was then modified to be more appropriate to the Jordanian environment and psychometric characteristics were derived for the scale. 10 reviewers specializing in counseling, psychometric, and psychiatry provided their notes and recommendations on the Jordanian version considering items suitability. Finally, the Jordanian version consisted of 28 items. The respondent has to rate how likely he/she would agree or disagree with each statement on a 5-point Likert scale ranging from 1"Never" to 5 "Almost Always". Semantics validity of item Distinction for the Jordanian version of the scale was calculated; item values ranged between (.40) and(.72), which indicated an adequate items discrimination validity. In addition, Cronbach's coefficient alpha was ($\propto$=81). These values are statistically significant. Hence, Brief COPE scale has adequate psychometric characteristics

Statistical Analysis:

Descriptive statistic measures which involve means and standard deviations were calculated to determine the prominent coping strategies, the levels of fear of coronavirus, and PTSD. Then, liner regression (Stepwise) was calculated to examine the prediction ability of coping strategies to fear of COVID-19 and PTSD. The significance level was set to ($\alpha = 0.05$).

Research Variable:

- **Independent Variable: Coping Strategies.**

- **Dependent Variables: Fear of Coronavirus andPTSD**

Results:

To investigate the first question "What are the most prominent coping strategies among frontline workers?", means and standard deviation were used. The results show that the most prominent coping strategies are substance abuse (M= 4.3444, SD= .96163) and the lowest is venting (M= 2.9608, SD= 1.04314), as shown in Table 1 below.

Table(1): The Most Prominent Coping Strategies

Rank	Variable	Mean	Std. Deviation	Rank	Variable	Mean	Std. Deviation
1	Substance Abuse	4.3444	.96163	8	Active-Coping	3.7059	1.01003
2	Religion	4.3125	.81132	9	Use of Instrumental Support	3.6777	1.05949
3	Acceptance	4.0735	.83209	10	Denial	3.4449	1.08146
4	Planning	3.8971	.94528	11	Use of Emotional Support	3.4130	1.11629
5	Humor	3.7868	1.03792	12	Self-Blame	3.2966	1.12882
6	Behavioral Disengagement	3.7512	.94959	13	Self-Distraction	3.0919	1.12794
7	Positive Reframing	3.7194	1.05397	14	Venting	2.9608	1.04314

Furthermore, to examine the second question "What are the levels of PTSD among frontline workers?", Means and standard deviation were used. The results show low level of PTSD among study sample (M= 2.2138, SD= .93603), as shown in Table (2) below:

Table (2) Means and Standard Deviation

Mean	N	Std. Deviation	level
2.2138	408	.93603	low

To investigate the third question "What are the levels of fear of coronavirus among frontline workers?", Means and slandered deviation were used. The results show low level of fear of coronavirus among study sample (M= 2.3106, SD= .99001), as shown in Table (3) below.

Table (3) Means and standard deviation

Mean	N	Std. Deviation	level
2.3106	408	.99001	low

Moreover, to investigate the fourth question "What is the prediction ability of coping strategies in PTSD among frontline workers?", Multiple Linear Regression was used by adopting the stepwise method in entering the predictive variables into the regression equation in the predictive model as shown in Table (4).

Table (4) Regression Hypothesis Test Results and their Multiple Correlation Coefficients and the Amount of Explained Variance for the Predictive Variables in each Predictive Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.478[a]	.229	.227	.82301	.229	120.450	1	406	.000
2	.575[b]	.330	.327	.76778	.102	61.515	1	405	.000
3	.615[c]	.379	.374	.74057	.048	31.311	1	404	.000
4	.633[d]	.401	.395	.72828	.022	14.754	1	403	.000
5	.643[e]	.413	.406	.72161	.012	8.477	1	402	.004
6	.654[f]	.427	.419	.71354	.014	10.141	1	401	.002
7	.661[g]	.436	.426	.70890	.009	6.277	1	400	.013

Significant at (0.05):
a. Predictors: (Constant), substance use

b. Predictors: (Constant), substance use, self-distraction.

c. Predictors: (Constant), substance use, self-distraction, Behavioral disengagement

d. Predictors: (Constant), substance use, self-distraction, Behavioral disengagement, Self-Blame.

e. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame, Humor

f. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame, Humor, Denial

g. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame, Humor, Denial, Planning.

It is clear from Table (4) that the seventh sub-predictive model of the independent predictive variables (drug use, self-distraction, behavioral disengagement, self-blame, humor, denial, planning) explained 43.6% of the variance with the predicted variable PTSD and then calculate the non-normative and standard regression weights, and the calculated t-test values for the independent (predictive) variables, with the predicted variable (dependent), fear, in the predictive model, as shown in Table (5):

Table (5) Non-Normative and Normative Weights of the Predictive Variables in the Prediction Model

Significant at (0.05)

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
7	(Constant)	4.252	.312		13.649	.000
	Substance Use	.254	.043	.261	-5.954	.000
	Self-Distraction	.195	.037	.235	5.263	.000
	Behavioral Disengagement	.194	.043	.197	-4.478	.000
	Self-Blame	.101	.037	.122	-2.708	.007
	Humor	-.133	.036	-.148	-3.706	.000
	Denial	.113	.036	.131	-3.108	.002
	Planning	.108	.043	.109	2.505	.013
a. Dependent Variable: BBBTOTAL						

It is shown that when the levels of Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame and Denial increase, then the level of PTSD increases as well. And when the level of humor increases, then the level of PTSD gets lower.

Finally, to examine the fifth question "What is the prediction ability of coping strategies in fear of coronavirus among frontline workers?", Multiple Linear Regression was used by adopting the stepwise method in entering the

predictive variables into the regression equation in the predictive model as shown in Table (6).

Table (6) Regression Hypothesis Test Results and their Multiple Correlation Coefficients and the Amount of Explained Variance for the Predictive Variables in each Predictive Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.424ᵃ	.179	.177	.89790	.179	88.784	1	406	.000
2	.476ᵇ	.227	.223	.87264	.047	24.849	1	405	.000
3	.504ᶜ	.254	.248	.85836	.027	14.592	1	404	.000
4	.518ᵈ	.268	.261	.85107	.014	7.950	1	403	.005
5	.528ᵉ	.278	.269	.84620	.010	5.648	1	402	.018
6	.537ᶠ	.288	.278	.84142	.010	5.579	1	401	.019

a. Predictors: (Constant), Substance Use

b. Predictors: (Constant), Substance Use, Self-Distraction.

c. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement

d. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame.

e. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame, Humor

f. Predictors: (Constant), Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame, Humor, Denial, Planning.

It is clear from the table (Table 6) that the sixth sub-predictive model of the independent predictive variables (i.e. substance abuse, self-distraction, behavioral disengagement, self-blame, humor, denial, planning) explained 28.8% of the variance with the predicted variable (i.e. fear of coronavirus), and then calculate the non-normative and standard regression weights, and the computed t-test values for the independent (predictive) variables with the predicted variable (dependent) (i.e.fear in the predictive model as shown in (Table 7):

Table (7): Non-Normative and Normative Weights of the Predictive Variables in the Prediction Model

Coefficientsᵃ		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		**B**	**Std. Error**	**Beta**		
6	(Constant)	4.054	.330		12.268	.000
	استخدام العقاقير	.279	.050	.271	-5.561	.000
	التشتت الذاتي	.155	.042	.176	3.714	.000
	الانكار	.130	.043	.142	-3.012	.003
	عدم الانخراط السلوكي	.151	.051	.144	-2.955	.003
	المزاح	-.118	.042	-.123	-2.793	.005
	التخطيط	.115	.049	.110	2.362	.019
a. Dependent Variable: الخوف						

It is shown that when the levels of Substance Use, Self-Distraction, Behavioral Disengagement, Self-Blame, and Denial increase, then the level of fear of coronavirus increases as well. And when the level of humor increases, then the level of fear of coronavirus gets lower.

Discussion:

The results show that the most prominent coping strategies are substance abuse then religion. This result is reasonable because previous research indicated that individuals get involved in more substance abuse (ex. medical drugs, smoking) during crises like COVID-19 pandemic to regulate their emotions and decrease mental ill-health, like stress and negative emotions, like fear of COVID-19 infection (Madanifare, et al., 2016). Also, the availability of medicine, especially when we keep in mind that most of them are medical staff,- may play role in this aspect.

In addition, the results showed that participants respectively use religion and acceptance as a coping strategies; this may be due to the fact that Jordanian citizens have faith in God and most of them possess spiritual faith of fate and destiny that may help them to lessen the pandemic effects

on them and accept it as God's fate. Moreover, the results of the study can be explained by the findings of previous studies that religious coping is related to well-being and decreases the fear of COVID-19 (Counted, et al., 2020).

Furthermore, the results show low levels of fear of COVID-19 and PTSD. These results are considered logical because Jordanian frontline workers are supplied with protective materials and follow the suitable protective procedures. Also, most of them isolate themselves to protect themselves and their families. Moreover, the study showed that coping strategies predicted 28.8% of the variance in fear of COVID-19. This is in line with Lotzin et al. (2020), Secer, Ulas, & Karaman-Ozlu, (2020). Also, Morales-Rodriguez (2021) found a negative relationship between coping strategies and fear of COVID-19 in that when the person experiences fear of the unknown, then the information he knows is insufficient to deal with his fear, which in turn may affect his coping strategies.

Likewise, the study showed that coping strategies predicted 43.6% of the variance in PTSD. The results of the current study are in line with Lotzin et al. (2020) and Shechter et al. (2020).

Conclusion:

Our study goes in accordance with previous findings and adds more findings related to the prediction ability of the coping strategies, which are not found in the previous studies. Also, it recommends conducting more studies regarding its variables among different samples within different contexts.

Disclosure statement:

No positional conflict of interest was reported by authors .

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