

Social Distancing and its Relationship to Psychological Stress among a Sample of Saudis during COVID-19 Pandemic

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ABSTRACT:

The aim of the current study is to identify the commitment level to social distancing and its relationship to psychological stress among members of Saudi society during COVID-19 pandemic. To achieve the purposes of the study, a descriptive correlational design was used. The sample of the study consisted of (536) Saudis selected using convenient sampling method from the regions of Taif, Makkah, Najran and Al-Jawf in Saudi Arabia. In data collection, the study used two instruments developed by the researchers: "social distancing scale" and "psychological stress scale". The study concluded that the commitment level to social distancing by the study sample during COVID-19 pandemic was moderate. It also revealed that there are statistically significant differences in the total commitment to social distancing due to age (in favor of 41-50 aged group), and the scientific qualification (in favor of holders of postgraduate degree), and that there were no statistically significant differences due to gender. The study concluded that the psychological stress level among the study sample was moderate. It also revealed that there are statistically significant differences in the psychological stress level among the study sample due to gender (in favor of females), and the scientific qualification (in favor of a secondary level or less), and that there were no statistically significant differences due to age. Furthermore, the study revealed a statistically significant negative correlation between the commitment level to social distancing and the exposure to psychological pressures. The study recommends the necessity for health and social care institutions to provide support, advice and counseling services that enhance community members' awareness about the application of social distancing, in addition to activate the strategies and methods of dealing with psychological pressures during crises and epidemics.

Keywords:

Social Distancing, Psychological Pressures, Saudi Community and COVID-19.

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Introduction

Being one of the most influential variables on the changes and transformations of globalization, reviewing the pyramid of human life would demonstrate that human race has suffered from many epidemics caused by different pathogens in history, such as: The Black Death, Cholera, Yellow Fever, Smallpox, Hong Kong flu (flu pandemic), SARS, Middle East respiratory syndrome (MERS), Spanish flu and Ebola. A common feature of these epidemics, that can easily turn into a pandemic and have high mortality rates, is that they are caused by zoonotic pathogens that are that are naturally transmissible from vertebrate animals to humans (Koçoglu & Tekdal, 2020). According to the World Health Organization, over the past years, viral diseases

are among the most serious public health issues. Some viral epidemics have appeared between 2002-2003, such as Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV)(Ahn et al., 2020). Furthermore, other viral epidemics have appeared later, such as H1N1 flu in 2009 and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in 2012. On the December 2019, cases of severe respiratory infections were reported in China, specifically in Hubei Province in Wuhan, by the Chinese Center for Disease Control and Prevention (CDC) and the local Centers for Disease Control and Prevention, which stated that the cause of the outbreak is due to a new strain of Coronavirus (Ebrahim & Memish, 2020). On the February 2020, the World Health Organization declared that (Covid-2019) is the cause of the respiratory infection. with the

increasing number of infections in China and most countries of the world, WHO has classified, on the March 2020, Covid-2019 as a pandemic, as the number of infections reached more than (700,000) case, with more than (35,000) death cases (Chen). In order to prevent the outbreak of the novel Corona virus (Covid-19), governments over the globe declared an extreme state of emergency, including the Kingdom of Saudi Arabia, as a set firm disciplinary measures were taken to prevent its outbreak, such as stopping all economic, commercial, social and sports activities; air and transportation traffic shut down; the commitment to social distancing inside and outside houses; and imposing the health mandatory quarantine, whether in home or hospital (Barry, Al Amri, & Memish, 2020). Social distancing can be defined as an avoidance of gatherings and physical contact with others. Health experts considered it a critical measure to minimize the morbidity rates of the virus, avoid overburdening health care systems, and even protect them from potential collapse in the event of unbearable high infection rates. Despite of its importance, social distancing may be accompanied by some downsides, such as feelings of loneliness, anxiety, fear, nervousness, anger, frustration, sadness and boredom (especially for quarantined individuals); and decreased levels of direct interaction and productivity as a result of the changes in the surrounding environment (Promotion, 2020). The term "Stress" is a general concept that includes several aspects, represented be stimuli resulting from stressful reactions. It also includes several physiological, psychological and social phenomena. Stress is not a stimulus for or a response to, but rather a relationship between an individual and the surroundings, in which he/she affects and is affected (Lazarus, 1988). Psychological stress refers to the relationship between an individual and his/her environment, resulting from his/her attempts to control the internal and external aspects and the relationship between them (Phillip, 1998). Psychological stress may cause significant problems for an individual,

including behavioral effects (e.g. a difficulty in sleeping, addiction to sedative drugs, heavy smoking, loss of appetite, acts of sabotage, and rebelling against the regulation), and emotional effects (e.g. feeling frustrated and depressed, losing hope, acting nervous, hypersensitivity to criticism, difficulty in speaking and expressing thoughts and feelings, and mood swings), and physical effects (e.g. nervous tension, high blood pressure and blood sugar, bloodshot eyes, chronic headache, suffering from acute stomach ulcers, and irritation of the colon (Chinaveh, 2013). No doubt, it is difficult to control stress, but it can be addressed through defining methods of adaptation used to control psychological pressures. Therefore, it can be said that the psychological stress occurs when an individual is unable to adapt to the psychological stress sources. An individual's increased and unbearable levels of psychological pressure may lead to increased levels of stress; affecting therefore the health, physical, psychological and mental state, and leading to collapse, depletion and destruction of energy, which may lead sometimes to death (Al-Fermawi, 2009).

Yuan et al.2020., reported the emotional state, physical responses, sleep quality and behavior of individuals in Hubei Province were compared to the unaffected provinces in China within two weeks in February 2020, health workers and businessmen became increasingly anxious, so most people in Hubei Province developed a more attitude. Positive in relation to infection risk and odds of surviving the COVID-19 epidemic. It also revealed that despite public awareness, sleep quality has not improved, and that there are levels of anxiety that affect quality of life during epidemics, including the implementation of mass quarantines (Yuan et al., 2020).

A recent study of "Coronavirus (COVID-19) and its relationship to stress and its effects showed that COVID-19 affects individuals' daily lives and causes forced social isolation and economic obstacles; stimulates phobias about disease;

generates feelings of despair, sadness and depression (Polizzi, Lynn, & Perry, 2020). In fact, individuals' psycho-structures vary; some may have different reactions to risks, and some may anticipate psychological anxiety leading them sometimes to have fits of anger, intense emotion, and sometimes nonstop crying or remaining silent regarding what is going on. And there are those who take precautions, conditions and safe measures for self and social protection, as this would contribute to reducing the rates of fear, anxiety and psychological stress. Therefore, due to the current circumstances and conditions witnessed by the world (in general) and the Kingdom of Saudi Arabia (in particular) as a result of COVID-19 pandemic; the subsequent measures of social distancing; individuals' inability to adapt with conditions of isolation, tension and loneliness, the current study sought identifying the commitment level to social distancing among a sample of Saudis and its relationship to their psychological stress during COVID-19 pandemic.

Statement of the Problem

The Kingdom of Saudi Arabia is considered among the first countries to take precautionary measures in order to limit the outbreak of Covid-19, as it sought to ensure the commitment to social distancing at houses, streets and public places, the commitment to self or institutional quarantine and banning gatherings during certain hours and days, except for work some facilities and institutions. By virtue of these precautionary measures, the outbreak of the virus has been somewhat decreased inside the Kingdom. Nonetheless, the application of these measures may have negative effects on humans. Therefore, it is important to assess the current situation in order to identify the commitment level to social distancing and its relationship to psychological stresses among society members, and to find solutions and proposals contributing to the reduction of the psychological stresses caused by social distancing during COVID-19 pandemic. Accordingly, the problem of the current study

stems from investigating the commitment level to social distancing and its relationship to psychological stress among a sample of Saudis during COVID-19 pandemic. More specifically, this study attempts to answer the following questions:

- 1- What is the commitment level to social distancing during COVID-19 pandemic among a sample of Saudis?
- 2- Are there statistically significant differences in the commitment level to social distancing among a sample of Saudis during COVID-19 pandemic, due to gender, age, and scientific qualification?
- 3- What are the psychological stresses resulting from COVID-19 pandemic among a sample of Saudis?
- 4- Are there statistically significant differences in the psychological stresses caused by COVID-19 pandemic among a sample of Saudis, due to gender, age, and scientific qualification?
- 5- Is there a statistically significant correlation between the commitment level to social distancing and psychological stress among a sample of Saudis during COVID-19 pandemic?

Study Objectives

The aim of the current study is to identify the commitment level to social distancing and the psychological stresses during COVID-19 pandemic among a sample of the Saudis, and to examine if there are any statistically significant differences in the commitment level to social distancing and the psychological stresses due to gender, age and scientific qualification. It also sought to identify the nature of the statistical correlation between the commitment to social distancing and psychological stresses.

Significance of the Study

The focus of the current study is still a novel one. Therefore, there is a scarcity, at the Arabian and local levels, of previous researches and studies addressing the same theme. Hence, it is considered one of the pioneering studies in its field in 2021. In collecting data related to the commitment to social distancing and psychological stresses among a sample of Saudis

during COVID-19 pandemic, the current study uses two instruments, and achieving therefore a better understanding of the two concepts, as well as their correlation. The findings of this study would contribute to helping policy makers, officials and stakeholders in terms of how taking the necessary measures, conditions and procedures for achieving commitment to social distancing in a safe and secure manner reduce psychological stresses levels and effects and provide Saudis with adequate mental health during this pandemic. The importance of the current study stems from its attempt to identify the commitment level to social distancing and the psychological stresses during COVID-19 pandemic among a sample of the Saudis, contributing therefore to enhancing awareness among Saudis about the importance of being committed to social distancing, due to its key role in avoiding the outbreak of Coronavirus. It also sought to provide asset of health guidance and instruction for the reduction of psychological

stresses, so that communities may enjoy sound levels of mental health.

Design of the Study

The descriptive correlational design was employed in the current study. This design is suitable for the nature of the study for data collection about the status quo of social distancing and psychological stress during COVID- 19 pandemic (descriptive design). Furthermore, the correlational design was employed to identify the nature of the correlation between the two variables of the study (social distancing, psychological stress).

Population and Sample of the Study

The population of the study included all members of the Saudi society in the year 2020. As for the sample of the study, this was (536) Saudis selected using random convenient sampling method from the Saudi society at Al Tayef, Mecca, Najran and Al Joufe as they agreed to participate in the study. The sample of study distributed according to gender, age, qualification as shown in table (1).

Table (1): Frequencies and Percentages for the Distribution of the Sample according to Demographic Variables

Variables	Category	Frequency	%
Gender	Male	250	%46.64
	Female	286	%53.36
Age	Less than 30 years	233	%43.47
	30-40	120	%22.38
	41-50	104	%19.40
	More than 50	79	%14.75
Qualification	Secondary or less	80	%14.93
	BA	271	%50.55
	Higher Education	185	%34.52
	Total	536	%100

Instruments of the Study

The study employed the following instruments for data collection from the sample of the study. These included:

Social Distancing Scale

This scale was constructed based on a thorough review of related literature and previous studies. The scale consisted of (23) items distributing on (2) dimensions: Indoor Spatial Distancing (10) items and Outdoor Spatial

distancing (13 items). 3 point Likert soring (Always =2, Sometimes=1, Never=0) was used for scoring the scale.

The validity of the Social Distancing Scale was checked in the preliminary format by a panel of (10) experts in psychology, social psychology and evaluation and measurement experts in the Saudi universities. These were asked to give their remarks about the content of items, wording clarity and the ability of the scale to achieve the objectives of the study. The reliability of the scale was verified by calculating internal consistency coefficients (Cronbach alpha). In doing so, the scale was administrated to a pilot sample selected out of the original sample and consisted of (40) subjects. Reliability coefficients for the total scale and the individual domains were calculated as shown in table (2).

Table (2): Reliability Coefficients for Social Distancing Scale

Dimension	Cronbach alpha
Indoor social distancing	0.84
Outdoor social distancing	0.87
Total	0.90

Table (2) shows that the total reliability coefficients for the Social Distancing Scale was (0.90), while the reliability coefficient for the first scale dimension “ Indoor social distancing” was (0.84) and was for the second dimension “ Outdoor social distancing” (0.87). These values were adequate to achieve the objectives of the study.

Psychological Stress Scale

The scale was developed after the researcher conducted a comprehensive review of related literature and previous studies. The scale included in the preliminary format (32) items distributing on (4) dimensions: Behavioral (8 items), Cognitive (8 items), Emotional (9 items)

and Physical (7 items). 3 point Likert soring (Always=2, Sometimes=1, Never=0) was used for scoring the scale.

The validity of the Social Distancing Scale was checked in the preliminary format by a panel of (10) experts in psychology, social psychology and evaluation and measurement experts in the Saudi universities. These were asked to give their remarks about the content of items, wording clarity and the ability of the scale to achieve the objectives of the study. The reliability of the scale was verified by calculating internal consistency coefficients (Cronbach alpha). In doing so, the scale was administrated to a pilot sample selected out of the original sample and consisted of (40) subjects. Reliability coefficients for the total scale and the individual domains were calculated as shown in table (3).

Table (3): Reliability Coefficients for Psychological Stress

Dimension and Total Score	Cronbach alpha
Behavioral	0.83
Cognitive	0.93
Emotional	0.89
Physical	0.87
Total	0.96

As seen in table (3), the total score for the reliability coefficients using Cronbach alpha was (0.96) while it ranged between (0.83) for the behavioral dimension and (0.93) for the cognitive dimension. These reliability values are adequate to achieve the objectives of the study.

Procedures

The problem of the study and its elements were identified, then, the population of the study was determined. After that, related literature and previous studies were reviewed to develop the items of the study (scales). Then, the preliminary format of the scales was prepared and validity and reliability for the scales were established. The necessary agreements for conducting the study were obtained, and the scales (instruments of the

study) were administrated via the internet to the targeted sample using convenient sampling from the different geographical regions in Kingdom of Saudi Arabia after it was prepared electronically using Google Drive. The link for accessing the study instruments was sent to the sample of the study using (WhatsApp). At the completion of the data, and the targeted sample was obtained, data was collected, scored and entered to SPSS software to analyze them. Results were obtained, then explained and discussed in light of related literature and previous studies. Finally, the suitable recommendations were suggested based on the results of the study. After referring to related literature and previous studies and taking the recommendations of some experts in

evaluation and measurement, the following scoring standard was employed for categorizing the levels of responses on the two scales used in the study: 0.00-0.67= low; more than 0.67-1.34= moderate; more than 1.34-2.00= high.

Results and discussion

Results related the first question of the study, stating: What is the commitment level to social distancing during COVID-19 pandemic among a sample of Saudis?

To answer this question, means and standard deviation for the commitment level of social distancing during COVID-19 pandemic among Saudis were calculated as shown in table (4).

Table (4): Means and standard deviation for the commitment level of social distancing during COVID-19 pandemic among a Saudis

Items- Dimension	Means	SD	Level
Outdoor Social Distancing	1.45	0.380	High
Indoor Social Distancing	1.17	0.450	Moderate
Total	1.33	0.350	Moderate

Table (4) indicates that the total commitment level of social distancing during COVID-19 pandemic among a Saudis means score was (M=1.33, SD=0.35), with a moderate level. The first dimension (indoor social distancing) ranked second (M=1.17, SD=0.45) with moderate level; while the second dimension (outdoor social distancing) ranked first (M=1.45, SD=0.38) with high level.

stresses resulting from COVID-19 pandemic among a sample of Saudis?

To answer this question, means and standard deviation for the commitment level of social distancing during COVID-19 pandemic among Saudis in light of gender, age and scientific qualification. Table (5) shows these results.

Results related the second question of the study, stating: What are the psychological

Table (5): Means and standard deviation for the commitment level of social distancing during COVID-19 pandemic among Saudi in light of gender, age and scientific qualification

Variable	Gender	No.	Indoor Social Distancing		Outdoor Social Distancing		Total	
			M	SD	M	SD	M	SD
Gender	Male	250	1.18	0.53	1.42	0.39	1.32	0.40
	Female	286	1.17	0.36	1.48	0.36	1.35	0.30
Age	Less than 30	233	1.11	0.46	1.44	0.41	1.30	0.38
	30-40	120	1.12	0.45	1.45	0.39	1.31	0.37

Qualification	41-50	104	1.36	0.39	1.52	0.31	1.45	0.26
	More than 50	79	1.20	0.43	1.42	0.33	1.33	0.31
	Secondary school or less	80	0.80	0.49	1.21	0.40	1.03	0.38
	BA	271	1.20	0.39	1.50	0.35	1.37	0.30
	Higher Education	185	1.30	0.43	1.49	0.37	1.41	0.33

Table (5) shows differences between the means scores for the commitment level of social distancing during COVID-19 pandemic among Saudis in light of gender, age and scientific

qualification. To identify the significance of these differences, Three way ANOVA analysis was used as seen in table (6)

Table (6): Three way ANOVA to identify the differences between the means score for the commitment level of social distancing during COVID-19 pandemic among Saudis in light of gender, age and scientific qualification

Source of explained variance	Dimensions	Sum of Squares	Dif	Squares average	F	Sig.
	Outdoor Social Distancing	461.475	1	461.475	3476.597	0.000
	Total	378.138	1	378.138	3665.526	0.000
Gender	Indoor Social Distancing	0.355	1	0.355	2.288	0.131
	Outdoor Social Distancing	0.119	1	0.119	.895	0.344
	Total	0.206	1	0.206	1.996	0.158
Age	Indoor Social Distancing	5.937	3	1.979	12.769	0.000
	Outdoor Social Distancing	1.734	3	0.578	4.355	0.005
	Total	2.881	3	0.960	9.310	0.000
Qualification	Indoor Social Distancing	9.921	2	4.961	32.007	0.000
	Outdoor Social Distancing	1.495	2	0.748	5.632	0.004
	Total	4.228	2	2.114	20.492	0.000
Error	Indoor Social Distancing	79.355	512	0.155		
	Outdoor Social Distancing	67.962	512	0.133		
	Total	52.818	512	0.103		
Total	Indoor Social Distancing	848.250	536			
	Outdoor Social Distancing	1211.107	536			
	Total	1018.420	536			

Table (6) indicates no statistically significant differences at ($\alpha=0.05$) for the

commitment level of social distancing during COVID-19 pandemic among Saudis in light of gender, while significant differences were found

due to age and qualification. To identify the statistical significant differences, Schaffer test for post hoc comparisons was used as seen in table (7)

Table (7): Scheffe' test for post hoc comparisons for the commitment level of social distancing during COVID-19 pandemic among Saudis in light of age and scientific qualification

Scale	Variables	Variable levels		Means difference	Sig.
Total score for social distancing scale	Age	Less than 30	41-50	0.15	0.001
		30- 40	More than 50	0.14	0.012
	Qualification	Secondary school or less	BA	0.34	0.000
			Higher Education	0.38	0.000

Table (7) indicates that there were statistically significant differences at ($\alpha=0.05$) in the commitment level of social distancing total score due to age group, in favor of less than (3), between the age group (41-50) and (more than 50), in favor of (41-50) age group. There were also statistically significant differences due to qualification between secondary school or less and BA, in favor of BA; and between secondary

school or less and higher education, in favor of higher education.

Results related the third question of the study, stating: What are the psychological stresses resulting from COVID-19 pandemic among a sample of Saudis?

To answer this question, means and standard deviation for psychological stresses resulting from COVID-19 pandemic among Saudis were calculated as shown in table (8).

Table (8): Means and standard deviation for psychological stresses resulting from COVID-19 pandemic among Saudis

Dimensions and total score	M	SD	Level
Cognitive	0.82	0.56	Moderate
Emotional	0.80	0.55	Moderate
Behavioral	0.74	0.44	Moderate
Physical	0.73	0.54	Moderate
Total	0.77	0.45	Moderate

As indicated in table (8), it can be seen that the total score for the stress during COVID- 19 pandemic among Saudis was (M=0.77, SD=0.45), with moderate level. The total dimensions of psychological stress were moderate. Cognitive dimension ranked first (M=0.82, SD=0.56) with a moderate level, followed by emotional dimension (M=0.80, SD=0.55), with a moderate level, then, behavioral dimension (M=0.74, SD=0.44) with a moderate level, while the physical dimension

ranked last (M=0.73, SD=0.54) with a moderate level.

Results related the fourth question of the study, stating: Are there statistically significant differences in the psychological stresses caused by COVID-19 pandemic among a sample of Saudis, due to gender, age, and scientific qualification?

To answer this question, means and standard deviations for the psychological stresses caused by COVID-19 pandemic among Saudis, due to

gender, age, and scientific qualification were elicited as shown in table (9).

Table (9): Means and standard deviations for the psychological stresses caused by COVID-19 pandemic among Saudis, due to gender, age, and scientific qualification

Variable	Gender	No.	Behavioral		Cognitive		Emotional		Physical		Total	
			M	SD	M	SD	M	SD	M	SD	M	SD
Gender	Male	250	0.72	0.49	0.76	0.61	0.72	0.57	0.63	0.54	0.71	0.47
	Female	286	0.75	0.40	0.86	0.50	0.86	0.52	0.81	0.52	0.82	0.43
Age	Less than 30	233	0.70	0.43	0.75	0.53	0.72	0.53	0.67	0.48	0.71	0.44
	30-40	120	0.72	0.36	0.83	0.51	0.85	0.48	0.68	0.59	0.78	0.39
	41-50	104	0.82	0.51	0.88	0.59	0.87	0.55	0.82	0.55	0.85	0.49
	More than 50	79	0.75	0.49	0.88	0.63	0.84	0.63	0.83	0.59	0.83	0.52
Qualification	Secondary or less	80	0.83	0.51	0.99	0.64	1.09	0.64	0.96	0.64	0.97	0.56
	BA	271	0.72	0.43	0.77	0.52	0.73	0.49	0.67	0.45	0.72	0.40
	Higher Education	185	0.72	0.43	0.79	0.56	0.76	0.53	0.70	0.59	0.75	0.47

Table (9) illustrates differences between the means scores of the psychological stresses caused by COVID-19 pandemic among Saudis due to gender, age, and scientific qualification. To

identify the significance of these differences, Three way ANOVA analysis was employed as presented in table (10).

Table (10): Three way ANOVA to identify the differences between the means score for the commitment level of social distancing during COVID-19 pandemic among Saudis in light of gender, age and scientific qualification

Source of variance	Dimensions	Sum of Squares	Dif	Squares average	F	Sig.
Gender	Behavioral	0.424	1	0.424	2.286	0.131
	Cognitive	0.846	1	0.846	2.794	0.095
	Emotional	1.163	1	1.163	4.359	0.037
	Physical	3.414	1	3.414	12.736	0.000
	Total	1.211	1	1.211	6.271	0.013
Age	Behavioral	0.516	3	0.172	0.926	0.428
	Cognitive	0.863	3	0.288	0.950	0.416
	Emotional	0.610	3	0.203	0.762	0.516
	Physical	0.950	3	0.317	1.181	0.316
	Total	0.533	3	0.178	0.920	0.431
Qualification	Behavioral	0.152	2	0.076	0.408	0.665
	Cognitive	1.645	2	0.823	2.717	0.067
	Emotional	4.266	2	2.133	7.993	0.000

	Physical	2.045	2	1.022	3.814	0.023
	Total	1.699	2	0.849	4.399	0.013
Error	Behavioral	95.053	512	0.186		
	Cognitive	155.034	512	0.303		
	Emotional	136.619	512	0.267		
	Physical	137.260	512	0.268		
	Total	98.849	512	0.193		
Total	Behavioral	396.219	536			
	Cognitive	521.844	536			
	Emotional	499.840	536			
	Physical	439.000	536			
	Total	429.709	536			

Table (10) shows statistically significant differences at ($\alpha=0.05$) in the total score of psychological stresses caused by COVID- 19 due to gender, in favor of females. The results also indicated statistically significant differences at ($\alpha=0.05$) in the total score of psychological stresses due to qualification. Finally, no

statistically significant differences were found due to age. To identify the significant differences in the psychological stresses level due to qualification, Schaffer test for post hoc comparisons was employed as shown in table (11).

Table (11): Schaffer test for post hoc comparisons to identify differences in psychological stresses caused by COVID- 19 pandemic due to qualification

Dimension	Qualification (I)	Qualification (J)	Means difference	Sig.
Behavioral	Secondary school or less	BA	0.117	0.040
		Higher education	0.105	0.000
Cognitive	Secondary school or less	BA	0.213	0.003
		Higher education	0.193	0.010
Emotional	Secondary school or less	BA	0.357	0.000
		Higher education	0.324	0.000
Physical	Secondary school or less	BA	0.290	0.000
		Higher education	0.264	0.000
Total	Secondary school or less	BA	0.247	0.000
		Higher education	0.225	0.000

Table (11) indicates that there were statistically significant differences at ($\alpha=0.05$) on the total score of psychological stresses and the individual dimensions of the construct (behavioral, cognitive, emotional, physical) due to qualification between secondary school or less and BA, in favor of secondary school or less. There were also

statistically significant differences between secondary school or less and higher education, in favor of secondary school or less. This result shows that those with a qualification of secondary school or less are more exposed and influenced by the psychological stresses caused by COVID- 19 compared to those with university degrees.

Results related the fifth question of the study, stating: Is there a statistically significant correlation between the commitment level to social distancing and psychological stress among a sample of Saudis during COVID-19 pandemic?

To answer this question, Pearson correlation coefficients were calculated between the commitment level to social distancing and psychological stress. Table (12) shows these results.

Table (12): Pearson correlation coefficients between the commitment level to social distancing and psychological stress

		Psychological Stress
Social Distancing	Pearson Coefficients	0.470
	Sig.	0.000
	Number of sample	536

Table (12) shows that there is a negative statistically significant correlation at ($\alpha=0.05$) between the commitment level to social distancing and psychological stress among a sample of Saudis during COVID-19 pandemic.

Discussion

The results of the first question of the study concerning the commitment level of social distancing during COVID—19 among Saudis was moderate ($M=1.33$). The first dimension of this construct (indoor social distancing) ranked second ($M=1.17$) with a moderate level, while the second dimension of the construct (outdoor social distancing) ranked first ($M=1.45$), with a high level. This result may be due to the outcomes of the reports issued by World Health Organization (WHO) since March, 2020 detailing the preventive measures that individuals can take against the spread of the virus. These reports emphasized the importance of social distancing as one of the most effective safety measures preventing from COVID- 19 infection.

Studies have confirmed recently that preventive measures are very vital because the most important method of infection with the new Coronavirus is spraying by an infected individual during coughing or sneezing and direct interaction between the infected individual. And uninfected items or the use of these things that they used previously (Moeed, Yue, & Ling,

2020).Furthermore, the Saudi Ministry of Health has issued from March, 2020 awareness promotion brochures and reports about the hazards related to COVID- 19, and hos individuals are infected by such a virus. In these, the Saudi Ministry of Health has stressed the need to abide with social distancing indoor and outdoor to prevent the dangers of this virus. Also, the Saudi Ministry of Interior imposed strict fines against those violating the preventive measures against COVID- 19; and social distancing is the most important of these measures. These fines range between (5) thousand Saudi Riyal and (100) thousand Saudi Riyal if the violation is repeated by the same person. These fines are doubled in some cases to reach (200) hundred thousand Riyal if the violation has a major negative effects on others. Additionally, some patrols were put on highways to reduce the unnecessary travel by people, especially between cities and different regions. These patrols put a road block to prevent the violators. Collaborating with the Saudi Municipality Ministry, Ministry of Trade, Ministry of Labor; the Saudi Ministry of Health, worked on defining the work hours for some of the firms and organizations, supermarkets, stores and shops while maintaining specific preventive measures such as putting stickers on the ground with a space of two meters between them to keep social distancing in addition to wearing face mask and gloves, avoiding hand shaking and using

sterilizers. Furthermore, furniture, offices and equipment are sterilized on regular basis. Therefore, all the above mentioned procedures executed by the official authorities in the Saudi government led to a significant increase in the commitment level of social distancing among Saudis. The Saudi Ministry of Education has also issued a decision to suspend the educational institutions such as schools, colleges and universities and to transfer to distance learning. The Saudi Ministry of Interior imposed a curfew for specific times and banned transporting on foot or by vehicles while issuing tickets for those violating these procedures since the beginning of COVID- 19 pandemic. An electronic platform was launched to issue e- permits to go outdoors in the case of emergency. The ministry of municipalities also issued a decision forcing stores and supermarkets to cancel their promotion offers and sales on the different commodities to prevent overcrowding among individuals. Finally, with the collaboration with Saudi Ministry of Communication, the Ministry of Health sends free SMS's on mobile phones for educational purposes to inform society members adopt the preventive measures indoor and outdoor to reduce the infection with COVID- 19.

As for the second question of the study, the results related this question indicated no statistically significant differences in the commitment level of social distancing during COVID- 19 due to gender. This result affirms the fact that both males and females at Najran and Al Tayef regions are equally aware of the importance of social distancing as a preventive measure against COVID- 19. This result may be also attributed to the efforts by the Saudi Ministry of Health, which has used all means in hand such as voluntary teams, to provide all Saudis with the needed information about the prevention of COVID- 19. These teams promoted the importance of indoor and outdoor social distancing. Additionally, statistically significant differences were found in the total score for commitment level of social distancing due to age

group, in favor of (41-50) age group. This result may be explained by the fact that the cognitive maturity of this age group may be higher compared to other age groups since people in this age are more aware of the hazards caused by COVID- 19 and have the necessary knowledge to avoid being infected by this dangerous virus. The result of the second question of the study further showed that those who hold higher education degrees (MA, PhD) report higher level of social distancing commitment as a whole and outdoor social distancing. It can be concluded- based on this result- that this group has higher awareness level of the negative health outcomes resulting from being infected by COVID- 19. They also have more information due to their willingness to know all that is available about this virus, which makes them maintain more level of social distancing. They also have a belief that they are a role model for others in the Saudi society, and this dictates the need to maintain higher commitment level of social distancing. All of this has led to the result that those who hold higher education degrees report higher levels of outdoor social distancing.

As for the results of the third question of the study, which indicated that the total score of the psychological stresses caused by COVID- 19 among Saudis was moderate ($M=1.77$), and this applies to the individual dimensions of the psychological stresses, this result may be explained by that Saudis face many stressors during COVID- 19. As for the cognitive ones, they find it difficult to organize their ideas, feel lack of concentration, and always forget things in addition to inner struggle. As for the behavioral dimension, they show impulsivity in doing things, are more prone to social withdrawal and experience sleep difficulties. Concerning the physical dimensions, they feel exhausted and fatigue, have headaches, back and neck pains. Finally, at the emotional level, anger and irritability have become common among Saudis and show anxiety. This result may be due to that COVID-19 have imposed in the last months many

challenges that resulted in economic, social, and psychological negative effects, especially among much fragile groups exposed to high risk factors. This also applies to those with chronic diseases and who suffer from psychological disorders. People are living a social isolation much more than they were living before COVID- 19 pandemic. Since the early stages of this pandemic, people worldwide are experiencing hardships as the effects of this pandemic prolonged since curfew and home quarantine have become common in many cities, and this has led that many people became unemployed. As for the adolescents and youth, these are not customized to stay home for long hours and these have started developing psychological, emotional and physical disorders due to this crisis.

With respect to the results of the fourth question of the study, it was found that there are statistically significant differences in the psychological stress level caused by COVID- 19 due to gender, in favor of females. This result may be due to that females lack emotional stability inside their families, especially when knowing that women cannot express their feelings. They find it difficult to disclose their inner emotions about the stress they experience during COVID-19. Furthermore, some husbands do not pay much attention to their wives' feelings and homes, which leads to higher levels of psychological stress among females compared to males. Additionally, feeling boredom by women in the Arab society due to its stereotyped family life, the free time she has, particularly unemployed women, makes it logical that women experience more levels of stress. By contrast, males can overcome their stress by going outdoor and have much time to practice hobbies, spend time in public parks or go to the wilderness, which in turn reduces their psychological stress. Furthermore, as women stay home, they are more exposed to news and T.V. reports covering the increases in the numbers of infection by COVID- 19. With the increase of social media access, and when knowing that women are more interested in this

communication and information technology, women are more exposed to negative news related to COVID-19, especially numbers of mortality and infections rates, this leads to higher levels of psychological stress among women as they feel more frustrated, anxious, depressed, which all leads to higher levels of psychological stress.

The results of the fourth question of the study, the study showed statistically significant differences in the total score of psychological stress due to qualification, in favor of secondary school or less. This implies that those with secondary school or less are more influenced by the stress caused by COVID- 19 and show more risk factors compared to those having university degrees. This may be a result that these in these groups cannot employ effective stress management strategies, especially during crisis. Additionally, the results of the fourth question illustrated that there no statistically significant differences in the total score of psychological stress due to age group, which indicates that all age groups are aware of the hazards of COVID-19. Also, they can use effective strategies to manage stressors during COVID-9.

The results related to the fifth question of the study, there was a statistically negative correlation between the level of social distancing commitment and psychological stress among Saudis during COVID- 19. This result may be due to that the negative effects resulting from social distancing as a response to COVID-19 may have contributed in increasing psychological stress, especially among those are already experiencing social isolation. The main concern is that social distancing may increase the psychological negative effects for those who are really experiencing loneliness and isolation. This makes it necessary to call different Saudis to communicate with other society members using distance communication tools to help others overcome the stress experienced during COVID-19. Also, the deprivation of some of the daily activities during COVID- 19 such as going to hypermarkets, playgrounds, leisure activities,

exercise has all led to the development of psychological stress, which confirms a logical fact indicating that the higher the commitment level is, the higher psychological stress during COVID-19 will be.

Recommendations

In view of the findings, the study recommends the necessity to ensure commitment to social distancing through: health and social care institutions keenness to provide support, advice and counseling services via social media, concentrating on how to appropriately address such psychological stresses; sending text messages by the Ministry of Health and medical bodies highlighting the importance of social distancing; broadcasting recorded episodes by those with a wealth of knowledge and specialization owners, enhancing awareness about COVID-19 risks and commitment to social distancing; the competent authorities application of firm measures related to indoor quarantine; and the use of educational leaflets rising awareness about the risks of Coronavirus and how to avoid the infection. No doubt, these proposals and solutions would have practical benefits on communities' awareness and the commitment level to social distancing. Saudi medical cities, government and private hospitals should have e-platforms to be used in raising awareness among Saudis about the risks of COVID-19, the preventive methods and how to properly apply social distancing.

Social workers and psychologists should be aware of their key role in limiting the psychological and social effects of the Covid-19 pandemic by activating, at the local level, family training and development programs, aiming to raise awareness among community individuals regarding the appropriate preventative measures against this disease; the appropriate application of social distancing standards indoor and outdoor; and training individuals on strategies of handling the consequent psychological stresses, especially for females, holders of secondary school education

and less, and those under the age of (30). Among these strategies that may be effective in controlling and handling the psychological stresses: accepting-based and coping-based behaviors; practicing mindfulness; and practices of family loving and affectionate directed to reduce stress and enhance resilience and recovery.

In addition to the above, it is possible to draw the attention of social workers psychologists towards spreading awareness and education related to ways of interaction among members of the same family during this pandemic. This would therefore reduce rates of family violence; provide family members with appropriate psychological and social support; ensuring the importance of positive parenting treatment with children during this pandemic, improving physical and psychological health care; and awareness about the best ways of protection through following the precautionary and preventive measures.

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References:

- [1] Ahn, D.-G., Shin, H.-J., Kim, M.-H., Lee, S., Kim, H.-S., Myoung, J., . . . Kim, S.-J. (2020). Current status of epidemiology, diagnosis, therapeutics, and vaccines for novel coronavirus disease 2019 (COVID-19). *Journal of microbiology and biotechnology*, 30(3), 313-324.
- [2] Al-Fermawi, H. a. A.-R., A. . (2009). *Psychological stress in work and life*. Amman, Jordan. House of Sana'a for Publishing and Distribution.
- [3] Barry, M., Al Amri, M., & Memish, Z. A. (2020). COVID-19 in the Shadows of MERS-CoV in the Kingdom of Saudi Arabia. *Journal of epidemiology and global health*, 10(1), 1.

- [4] Chen, Y. L. Q., Guo, D.(2020) Emerging coronaviruses: Genome structure, replication, parthenogenesis. *Journal of Virology*, 92, 418423.
- [5] Chinaveh, M. (2013). The effectiveness of multiple stress management intervention on the level of stress, and coping responses among iranian students. *Procedia-Social and Behavioral Sciences*, 84, 593-600.
- [6] Ebrahim, S. H., & Memish, Z. A. (2020). COVID-19: preparing for superspreader potential among Umrah pilgrims to Saudi Arabia. *Lancet* (London, England), 395(10227), e48.
- [7] Koçoglu, E., & Tekdal, D. (2020). Analysis of Distance Education Activities Conducted during COVID-19 Pandemic. *Educational Research and Reviews*, 15(9), 536-543.
- [8] Lazarus, A. (1988). *Multimodal Behavior Therapy*. New York. Springer.
- [9] Moeed, Y. A. G., Yue, L., & Ling, L. C. (2020). Research progress of new coronavirus (COVID-19): Theoretical study: تقدم البحوث المتعلقة بفيروس كورونا الجديد (كوفيد-19): دراسة نظرية. *مجلة العلوم الطبية و الصيدلانية*, 1(4).
- [10] Phillip, R. (1998). *Health Psychology*. An International Thomson Pubcom, U.S.A.
- [11] Polizzi, C., Lynn, S. J., & Perry, A. (2020). Stress and coping in the time of covid-19: pathways to resilience and recovery. *Clinical Neuropsychiatry*, 17(2).
- [12] Promotion, N. C. f. M. H. (2020). Social Distancing and Social Isolation. . http://ncmh.org.sa/index.php/pages/corona_view/3.
- [13] Yuan, S., Liao, Z., Huang, H., Jiang, B., Zhang, X., Wang, Y., & Zhao, M. (2020). Comparison of the indicators of psychological stress in the population of Hubei province and non-endemic provinces in China during two weeks during the coronavirus disease 2019 (COVID-19) outbreak in February 2020. *Medical science monitor: international medical journal of experimental and clinical research*, 26, e923767-923761.