



The psychological effects of the complete closure in the state of Kuwait during the corona pandemic: A study in light of demographic variables

Lubna A. Al-Kazi⁽¹⁾

Hend B. Al-Ma'seb⁽²⁾

Maha M. Al-Sejari⁽³⁾

Abstract

Objectives: The aim of this cross-sectional study was to examine the differences between participants' socio-demographic variables, and the Depression, Anxiety, and Stress Scale [DASS] and its three sub-scales (depression, anxiety, and stress) among individuals who lived in Kuwait during the total lockdown due to the COVID-19 pandemic.

Method: An online survey was distributed to 975 participants via WhatsApp and Twitter, using the convenience non-random sampling method. The survey consisted of three sections: a written consent form, demographic items, and the DASS. **Results:** The findings showed that Kuwaitis, males, widowed, individuals who were 50 and above, businessmen, higher educational level had a greater likelihood of experiencing depression, anxiety, and stress than the other groups during this pandemic. **Conclusion:** It was determined that intervention programs aimed at improving the population's mental health are needed in the lockdown period to support mental health and wellbeing and reduce mental illness symptoms during the COVID-19 pandemic.

Keywords: psychological effects, demographic, complete closure, Corona Pandemic, Kuwait

(1) Professor, Department of Sociology and Social Work, Kuwait University.
E-mail: dr_alkazi@hotmail.com

(2) Professor, Department of Sociology and Social Work, Kuwait University.
E-mail: hendbatel@hotmail.com

(3) Professor, Department of Sociology and Social Work, Kuwait University.
Corresponding author. E-mail: huna1973@hotmail.com

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الآثار النفسية للإغلاق التام في دولة الكويت في أثناء جائحة كورونا: دراسة في ضوء المتغيرات الديموغرافية

لبنى أحمد القاضي⁽¹⁾

هند باتل المعصب⁽²⁾

مها مشاري السجاري⁽³⁾

ملخص

الأهداف: هدفت الدراسة إلى قياس الفروق بين أفراد المجتمع المحلي في أثناء الإغلاق الكلي الذي فرض في دولة الكويت بسبب جائحة كوفيد-19 في بعض المتغيرات الاجتماعية والديموغرافية، ومقياس الاكتئاب والقلق، والضغط النفسي [DASS] بأبعاده الثلاثة. **المنهج:** طبقت الاستمارة الإلكترونية على 975 مشاركاً باستخدام طريقة المسح بالعينة المتاحة. بنيت الاستمارة على ثلاثة أجزاء: نموذج موافقة خطية للمشاركة، وبعض المتغيرات الديموغرافية، ومقياس [DASS]. **النتائج:** أظهرت النتائج أن الذكور والأرامل وكبار السن ممن تجاوزوا خمسين عاماً، ورجال الأعمال والحاصلين على مستوى تعليمي عالٍ كانوا أكثر عرضة للإصابة بالاكتئاب والقلق والضغط النفسي مقارنة بالفئات الأخرى خلال فترة الإغلاق إبان هذه الجائحة. **الخاتمة:** أوصت الدراسة بأهمية الاستعانة ببعض البرامج الخاصة للتدخلات العلاجية التي تهدف إلى تحسين الصحة النفسية للسكان خلال فترة الإغلاق؛ وذلك لدعم الصحة النفسية والرفاهية والتقليل من الأعراض المصاحبة للأمراض العقلية في أثناء جائحة كوفيد-19.

الكلمات المفتاحية: الآثار النفسية، المتغيرات الديموغرافية، الإغلاق التام، جائحة كورونا، الكويت

(1) أستاذ، قسم الاجتماع والخدمة الاجتماعية، جامعة الكويت، الإيميل: dr_alkazi@hotmail.com

(2) أستاذ، قسم الاجتماع والخدمة الاجتماعية، جامعة الكويت، الإيميل: hendbatel@hotmail.com

(3) أستاذ، قسم الاجتماع والخدمة الاجتماعية، جامعة الكويت، الباحث المراسل، الإيميل: huna1973@hotmail.com

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Introduction

Since January 2020, when the World Health Organization [WHO] declared the outbreak of the novel coronavirus [COVID-19] to be a health pandemic of international concern, stress levels everywhere have been increasing. As countries began to respond and take drastic measures, anxiety levels increased as people lost jobs and the news media gave grim reports of victims and death tolls. Not knowing what the future would bring added to the fear and panic around the world. Furthermore, the “shutdown” or “stay at home” orders issued by various countries’ governments led to a greater toll on people’s mental health. Increased social isolation disrupted people’s usual activities and livelihood.

Due to the radical alterations to their lifestyles since the emergence of the pandemic, many individuals are suffering from several mental illnesses such as anxiety, stress, and depression (Bérard et al., 2021; Han et al., 2021; Kite et al., 2021; Sharman et al., 2021). According to the WHO (2020) report, the sudden emergence of COVID-19 as a new disease, its vast global spread, and its life-threatening impacts on patients’ health all are contributing to high rates of anxiety and fear among the general public. It is believed that “levels of loneliness, depression and self-harm or suicidal behavior are expected to rise” (WHO, 2020).

Several researchers (Bonardi et al., 2021; Pisula et al., 2021; Somma et al., 2021; Tsamakidis et al., 2021) state that vulnerable groups such as children, adolescents, the elderly, and individuals with special needs are at higher risk of rising mental health issues during the COVID-19 pandemic due the precautions and regulations put into place by the authorities to control the rapid spread of the disease. These precautions include social/physical distancing, avoiding crowded places, closing schools and medical facilities, and cancelling public events such as festivals and sporting matches.

An Academy of Medical Sciences survey was conducted by Ipsos MORI (2020) among the general population to examine the impact of physical distancing and social isolation on individuals' mental wellbeing during the COVID-19 pandemic. The survey findings revealed a high rate of negative feelings, depression, self-harm, anxiety, stress, and suicidal ideation as consequences of the negative effect of the pandemic on individuals' mental health. The current high rate of mental health issues can be attributed to many socio-economic and health factors, such as social isolation, loneliness, and financial difficulties due to the economic crisis. Moreover, other studies conducted during the lockdown period found many negative family issues and problems reported by participants, such as shortage of supplies, small living spaces, lack of personal space, and domestic violence (Bradbury-Jones & Isham, 2020; Wang G. et al., 2020).

The following cross-cultural research aims to examine the significant impact of the COVID-19 outbreak on individuals' mental illness and psychological distress. For example, research by Brooks et al. (2020) and Shigemura et al. (2020) found high levels of post-traumatic stress symptoms, confusion, anxiety, distress, and anger reported by individuals who were in quarantine or isolation during the COVID-19 pandemic as part of the public health authority's precautionary measures to constrain the spread of the disease. Li et al. (2020) conducted a study of 17,865 people in eastern China to examine the impact of COVID-19 on their emotional and cognitive indicators before and after the January 20 announcement of the pandemic. The study found that participants reported high scores for negative emotions such as depression, anxiety, and irritation, and reported lower scores for positive emotional indicators of psychological traits such as life satisfaction and happiness. Gao et al. (2020) found that female college students in China reported higher scores for anxiety disorders compared to male college students during the COVID-19 pandemic.

The following cross-cultural research aims to investigate the effect of the COVID-19 lockdown during the pandemic on individuals' mental health status and prevalence of psychological distress symptoms. For example, Khubchandani et al. (2021) conducted study among 1978 adult in US to assess the prevalence of anxiety and depression due to imposing of lockdowns. The results revealed that 42% of the participants had anxiety, and 39% of the participants reported psychological distress. Moreover, the study detected that the following factors age, annual household income, occupation, area of residence, ethnicity, and number of children as significant predictors for developing psychological distress, depression, and anxiety among the study's participants. Furthermore, the study showed that level of anxiety symptoms was highly reported by female, and level of depression was highly reported by male. Other study among 403 participants in India was designed to measure the impact of enforcing lockdown on individuals' mental health and psychological symptoms, illustrated that high levels of depression, anxiety, and stress were reported among participants who belong to lower socio-economic status, and they had difficulty to tolerate the lockdown because of shortage in supplies (Rehman et al., 2021). Moreover, the study's result found that high rate of reported depression, stress, and anxiety levels were detected among students or participants who were working in healthcare professionals.

Another study to examine the influence of COVID-19 lockdown on individuals' mental health was Fountoulakis et al. (2021) study among 3399 individuals in Greece during the COVID-19 lockdown. It revealed that half of the participants were following several false beliefs about COVID-19, and many of them are holding beliefs in conspiracy theories. In addition, the study found that 45% of the participants show an increase in the levels of anxiety rates, 10.40% held suicidal thoughts, and 9.31% identified with clinical depression.

Furthermore, the study's outcomes detected that the main risk factors of developing mental health problems were age, former history of depression, and suicidal attempts.

A longitudinal study in UK among 168 children who were under 12 years old during COVID-19 lockdown demonstrated a significant impact of lockdown on children mental illness that caused to increase in depression symptoms (Bignardi et al., 2021). Sommerlad et al. (2021) study among three European countries (France, Italy, and Spain) during the COVID-19 pandemic to examine the effect of social isolation on elderly's mental health who are 50 years old and above. The study's outcome showed that individuals who were at high risk of developing psychological distress symptoms were aged 70 years and older, had coresident before the imposing of the lockdown, and who live in Spain. Moreover, the study revealed that during the lockdown half of the participants felt depressed and sad from the three countries. Liu et al. (2021) study among 5175 Chinese children and adolescents to investigate the impact of enforcing of the lockdown during the COVID-19 pandemic on their mental health wellbeing. Finding of the study illustrated that post lockdown, reported depression rate among children and adolescents were 12.33% compared to 6.26% of the participants experienced anxiety. In addition, the study's outcome revealed that there were positive association between experiencing anxiety and depression post lockdown and insomnia, fighting with parents, suicidal thought, challenging in concentrating during online learning, and being in depressive mood and feeling anxious during lockdown. A study to compare individuals' psychical distress symptoms before and during the implantation of lockdown during COVID-19 among 662 mid-aged in France demonstrated a significant impact of the social distancing restrictions on mental health (Andersen et al., 2021). Findings of the study showed that the prevalence of psychological distress such

as depression and anxiety were higher among participants who had these symptoms before the imposing of the lockdown. Furthermore, the study detected that the main risk factors of experiencing mental health problems were among women, participants with low income, and living lonely.

Aperformed study Hoffart et al. (2021) among 10,061 Norwegian adults to examine the association between developing mental health illness and the network of stress-related states during COVID-19 pandemic such as loneliness, financial uncertainties, and be afraid of getting the virus. The study detected that there was significant association between prevalence of generalized anxiety disorder and sleeping problems among participants and fear of passing away from the coronavirus or losing their beloved ones from the virus. Moreover, findings of the study detected a significant association between high prevalence of major depressive disorder symptoms and thinking about economic problems, household financial uncertainty, and feeling isolated and loneliness.

Social cognitive theory

Through personal, behavioral, and environmental influences, social cognitive theory [SCT] explains human behavior and coping efficacy with the threat and mechanisms they use to achieve a successful adaptation to the situation (Bandura, 2001). According to SCT, COVID-19 pandemic create a threatening environment that stimulate human behavioral processes to cope, control, or adapt with such changes that occur during the pandemic, and explain in turn the effect of the coping process on individuals' personal and behavioral condition. Brooks et al. (2020) showed that during the COVID-19 pandemic, the pandemic is observed as a threatening setting, in the process of controlling the threat or cope with it, individuals might alleviate stress reaction that affect subsequently their mental health.

Purpose of the Study

The purpose of the current study was to investigate whether there are any significant differences among socio-demographic variables such as gender, marital status, age, occupation, level of education, and nationality of the participants who were living in Kuwait during the total lockdown that was imposed due to the COVID-19 pandemic, and the three negative emotions depression, anxiety, and stress.

Significance of the study

After the first confirmed case of COVID-19 was reported in Kuwait on February 23, 2020, the Kuwaiti Ministry of Health announced a number of health regulations and precautionary procedures to constrain the rapid spread of the virus among the population. These regulations included a partial and then a complete lockdown for three months, enforced weeks of quarantine, border shutdowns, closure of work and school, and cancellation of all public events and activities. Under these strict conditions, only essential services related to healthcare, security, telecommunications, water, food, and energy installations are allowed to operate. People are not allowed to leave their homes unless they have permission from the authority for urgent situations such as illness or to purchase groceries. This radical change in people's daily life, aside from the fear of contracting the disease, might be contributing to the aggravation of many mental illness disorders such as depression, anxiety, self-harm, suicide, and stress, as found by several studies (Ho et al., 2020; Li et al., 2020; Lima et al., 2020; Rajkumar, 2020).

To the best of the authors' knowledge, the current study is considered to be one of only a few that have been conducted in Kuwait during the lockdown that looks at the association between socio-demographic variables, and depression, anxiety, and stress. The precautions that have been imposed have interrupted many

of the social interactions that are important to psychological and physical health and wellbeing.

Research Questions

Research question: Is there a statistically significant differences between socio-demographic variables such as gender, marital status, age, occupation, level of education, and nationality and the three negative emotions depression, anxiety, and stress among individuals who were living in Kuwait during the total lockdown that was imposed due to the COVID-19 pandemic?

Research hypotheses

H1: There is a significant difference between socio-demographic variables such as gender, marital status, age, occupation, level of education, and nationality and depression among individuals who were living in Kuwait during the total lockdown that was imposed due to the COVID-19 pandemic?

H2: There is a significant difference between socio-demographic variables such as gender, marital status, age, occupation, level of education, and nationality and anxiety among individuals who were living in Kuwait during the total lockdown that was imposed due to the COVID-19 pandemic?

H3: There is a significant difference between socio-demographic variables such as gender, marital status, age, occupation, level of education, and nationality and stress among individuals who were living in Kuwait during the total lockdown that was imposed due to the COVID-19 pandemic?

Study Terminology

Depression

“An emotional reaction frequently characterized by sadness, discouragement, despair, pessimism about the future, reduced activity and productivity, sleep disturbance or excessive fatigue, and feelings of inadequacy, self-effacement, hopelessness” (Barker, 2014, p.114). Also, depression is defined as a clinical syndrome, defined by official classification based on presence of several clinical features that might cause by biological and psychological factors (Paykel, 2008, p.2).

Anxiety

“A feeling of uneasiness, tension, and sense of imminent danger. When it recurs frequently and interferes with effective living or a sense of well-being or is otherwise *maladaptive*, it is known as *anxiety disorder*” (Barker, 2014, p.25).

Stress

“Any influence that interferes with the normal functioning of an organism and produces some internal strain or tension. Human psychological stress refers to environmental demands or internal conflicts that produce *anxiety*” (Barker, 2014, p.414).

COVID-19

Is a new coronavirus (SARS-CoV-2, initially named 2019-nCoV) that on January 12, 2020, its genetic sequence of SARS-CoV-2 has been recognized officially by World Health Organization [WHO] (Corman et al., 2020). It is a severe acute respiratory syndrome where the first reported case was in the city of Wuhan, China in December, 2019 (WHO, 2020).

Methods

To assess the association between socio-demographic variables and DASS during COVID-19 pandemic, a cross-sectional design was used. This design includes observing the data that is collected from a set of variables at one given point in time from a specific population. The target population is the Kuwaiti society, and the sample of this study was collected during the total lockdown in Kuwait (10-30 May 2020).

Data Collection

The study used a convenience-sampling method (non-probability sample) to recruit the participants. An online survey was distributed during the lockdown period in Kuwait via WhatsApp and Twitter, which are among the most popular applications in Kuwait. The online survey used to collect the data in the current study because it was difficult to reach the sample of the study in person due to the total lockdown and curfew in Kuwait in the time of collecting the data. The online survey was designed using the Google survey app as the platform for the database. The link to the online survey was sent to the participants via the WhatsApp. According to Al-Kandari (2019) the WhatsApp is one of the most popular social media platforms in Kuwait. After the submission of the online survey by participants, all the information was saved to the second author's Google account.

The online survey had three sections, starting with the written consent form. The second section included questions about demographic items such as marital status, age, gender, occupation, and level of education. The third section included the [DASS].

Participants

The participants were restricted to individuals who were 18 and older and living in Kuwait during the lockdown and curfew. A total of 975 participants volunteered to participate in this study. Their ages ranged from 18 to 79 years ($M = 38.5$ yrs., $SD = 13.84$). 78.9%

were Kuwaiti and 20.3% were non-Kuwaiti. Females comprised 61.1% of the sample, while males comprised 37.7%. The majority of the sample was employees (52.3%), followed by students (24.5%), retirees (11.3%), businessmen (7.3%), and unemployed (3.9%). In terms of marital status, 54.2% of the participants were married, 35.6% were single, 8.1% were divorced, and 1.3% were widowed. A total of 9.4% of the participants had a high school diploma or lower, 67.4% had a bachelor's degree, and 22.5% had a master's degree or higher. A total of 22.1% of the participants had chronic diseases, while 76.9% did not have chronic diseases. With regard to exposure to violence, 11.7% of the sample were exposed to violence, and 87.5% were not. Of those participants exposed to violence, 12.8% experienced emotional abuse, 5.4% experienced verbal abuse, and 0.3% experienced physical abuse.

Ethical statement

The data collection procedures follow the university research method rules and regulations. The first section of the online survey included a written consent form. This consent form included the following: respondent's agreement to participate in the study, a request for cooperation, assurance of confidentiality, freedom to participate in the research, and the right to withdraw from the study at any time without obligation.

Measures

The Depression, Anxiety, and Stress Scale [DASS]. DASS was developed by Lovibond and Lovibond (1995). It is a 42-item self-report measure containing three 14-item subscales. It is designed to measure three negative emotions (depression, anxiety, and stress) and responses were made on a 4-point Likert scale, ranging from 1 = "Did not apply to me at all" to 4 = "Applied to me very much, or most of the time." The DASS showed good concurrent and discriminant validity. In addition, the DASS had excellent internal consistency,

with Cronbach's alpha for depression (0.94), anxiety (0.87), and stress (0.91) (Antony et al., 1998).

The DASS was translated into Arabic because the language of the scale was English. The translation was conducted independently by professionals who were fluent in both the Arabic and English languages. In addition, the field test was conducted for the Arabic version of the questionnaire, utilizing four judges from the Department of Sociology and Social Work at Kuwait University who were familiar with the study. In the evaluation, some modifications in wording were required to account for the cultural context for some of the items. Therefore, some items were modified based on the suggestions of the judges. The DASS has high internal consistency. The Cronbach's alpha for the scale was 0.96. The reliability alpha scores of these subscales reported 0.92 for depression, 0.90 for anxiety, and 0.91 for stress. These scores were all excellent.

Data Analysis

The Statistical Package for Social Sciences (IBM SPSS 25.0) was used in this study. Descriptive statistics for means, standard deviation, percentages, and frequencies were used. In addition, The *t*-test and Analysis of Variance [ANOVA] were used to measure differences between groups.

Results

Gender

A *t*-test was conducted to compute differences between gender and depression, anxiety, and stress. The results showed that there were significant differences between gender and depression ($t = 2.93, p = 0.003$), with a mean score of 47.95 for males and 46.40 for females. There were significant differences between gender and anxiety ($t = 3.54, p = 0.000$), with a mean score of 48.95 for males

and 47.34 for females. There were significant differences between gender and stress ($t = 3.35$, $p = 0.001$), with a mean score of 43.28 for males and 41.42 for females. The results showed that males had high level of depression, anxiety, and stress than females during the COVID-19 pandemic in Kuwait (see Table 1).

Table 1

Results of t-test Analysis Gender with DASS & Sub-scales

Scales	Male		Female		$t(975)$	p	Cohen's d
	M	SD	M	SD			
Depression	47.95	6.92	46.40	8.17	2.93	.003	0.194
anxiety	48.95	6.41	47.34	6.80	3.54	.000	0.234
Stress	43.28	7.56	41.42	8.58	3.35	.001	0.220

Nationality

A t -test was conducted to find differences between participants' nationality and experiencing depression, anxiety, and stress. The results showed that there were significant differences between the participants' nationality and depression ($t = 3.98$, $p = 0.000$), with a mean score of 47.57 for Kuwaitis and a mean score of 45.08 for non-Kuwaitis. There were significant differences between the participants' nationality and anxiety ($t = 2.83$, $p = 0.005$), with a mean score of 48.33 for Kuwaitis and a mean score of 46.79 for non-Kuwaitis. There were significant differences between participants' nationality and stress ($t = 1.98$, $p = 0.048$), with a mean score of 42.45 for Kuwaitis and a mean score of 41.13 for non-Kuwaitis. The results showed that Kuwaiti have high level of depression, anxiety, and stress than non-Kuwaiti during the COVID-19 pandemic in Kuwait (see Table 2).

Table 2*Results of t-test Analysis Nationality with DASS & Sub-scales*

Scales	Kuwaiti		Non-Kuwaiti		<i>t</i> (975)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Depression	47.57	7.50	45.08	8.09	3.98	.003	0.263
anxiety	48.33	6.53	46.79	6.96	2.83	.000	0.187
Stress	42.45	8.33	41.13	7.79	1.98	.001	0.129

Marital Status

One-way ANOVA was conducted to test differences between groups in terms of participants' marital status and their depression, anxiety, and stress. Marital status was categorized as follows: married, single, divorced, and widowed. There were statistically significant differences between participants' marital status and their depression score ($F(3,912) = 18.59, p = 0.000$). There were also statistically significant differences between participants' marital status and their anxiety score ($F(3,910) = 12.97, p = 0.000$). Moreover, there were statistically significant differences between participants' marital status and their stress score ($F(3,926) = 15.34, p = 0.000$). The results showed that participants who are widowed have high level of depression and stress than the other marital groups during the COVID-19 pandemic in Kuwait. However, participants who are married have high level of anxiety than the other marital groups during the COVID-19 pandemic in Kuwait (see Table 3).

Table 3

One-way ANOVA between the Participants' Marital Status & DASS & Sub-scales Scores

Scale	Married		Single		Divorced		Widowed		<i>F</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Depression	48.5	6.8	45.3	7.9	43.4	10.0	48.6	6.8	18.59***	0.058
anxiety	49.1	6.1	46.7	6.6	45.4	8.3	48.3	6.8	12.97***	0.041
Stress	43.6	7.5	40.1	8.2	39.9	10.1	45.4	8.6	15.34***	0.047

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, (2-tailed).

Level of education

One-way ANOVA was conducted to test differences between groups in terms of participants' level of education and their depression, anxiety, and stress. The participants' level of education was classified as follows: high school diploma or lower, bachelor's degree, and master's degree or higher. The results showed that there were statistically significant differences between participants' level of education and their depression score ($F(2,914) = 14.23, p = 0.000$). Furthermore, there were statistically significant differences between participants' level of education and their anxiety score ($F(2,912) = 14.68, p = 0.000$). There were also statistically significant differences between participants' level of education and their stress score ($F(2,928) = 15.13, p = 0.000$). The results showed that participants who had a master degree or higher have high level of depression, anxiety, and stress than the other educational groups during the COVID-19 pandemic in Kuwait (see Table 4).

Table 4

One-way ANOVA between the Participants' Level of Education & DASS & Sub-scales Scores

Scale	High school diploma or lower		Bachelor's degree		Master's degree or higher		<i>F</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Depression	45.5	7.1	46.4	8.2	49.4	5.8	14.23***	0.030
anxiety	46.2	6.6	47.5	7.0	50.0	5.0	14.68***	0.031
Stress	40.3	7.5	41.5	8.8	44.8	6.9	15.13***	0.032

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, (2-tailed).

Age

One-way ANOVA was run to examine differences between groups in terms of participants' age and their depression, anxiety, or stress. The age variable was grouped as follows: 18-29 years old, 30-39 years old, 40-49 years old, and 50 and older. The results revealed statistically significant differences between participants' age and their depression score ($F(3,849) = 14.73, p = 0.000$). Furthermore, there were statistically significant differences between participants' age and their anxiety score ($F(3,854) = 11.31, p = 0.000$). There were also statistically significant differences between participants' age and their stress score ($F(3,863) = 22.78, p = 0.000$). The results showed that participants who are 50 years old and above have high level of depression, anxiety, and stress than the other age groups during the COVID-19 pandemic in Kuwait (see Table 5).

Table 5

One-way ANOVA between the Participants' Age & DASS & Sub-scales Scores

Scale	18- 29		30-39		40-49		50 & older		<i>F</i>	η^2
	yrs old		yrs old		yrs old					
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Depression	45.0	8.1	46.8	7.9	47.1	7.7	49.6	6.0	14.73***	0.049
anxiety	46.6	6.6	47.8	6.8	48.0	7.2	50.0	5.0	11.31***	0.038
Stress	39.6	8.1	41.8	8.4	42.4	8.4	45.5	6.6	22.78***	0.073

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, (2-tailed).

Participants' Occupation

One-way ANOVA was conducted to test differences between groups in terms of participants' occupation and their depression, anxiety, and stress. The participants' occupations were categorized as follows: student, employee, unemployed, businessman, and retired. The results showed that there were statistically significant differences between participants' occupation groups and their depression score ($F(4,912) = 12.66, p = 0.000$). Moreover, there were statistically significant differences between participants' occupation groups and their anxiety score ($F(4,910) = 7.25, p = 0.000$). There were also statistically significant differences between participants' occupation groups and their stress score ($F(4,926) = 13.96, p = 0.000$). The results showed that participants who are businessman have high level of depression, anxiety, and stress than the other occupational groups during the COVID-19 pandemic in Kuwait (see Table 6).

Table 6

One-way ANOVA between the Participants' Occupation & DASS & Sub-scales Scores

Scale	Student		Employee		Unemployed		Retired		businessman		<i>F</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Depression	44.8	8.5	47.4	7.4	43.5	7.7	47.4	7.9	50.5	5.1	12.66***	0.053
anxiety	46.5	7.0	48.1	6.8	46.0	5.7	49.7	5.9	50.0	4.6	7.25***	0.031
Stress	39.3	8.1	42.8	8.2	39.0	7.9	42.8	7.7	45.5	6.8	13.96***	0.057

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, (2-tailed).

Discussion

COVID-19 is a global pandemic that could have an impact on the mental health of the general population. Torales et al. (2020) stated that the appearance of mental health issues associated with the COVID-19 pandemic could develop into long-lasting health problems which need to be addressed. The World Health Organization (2020) found that the major psychological impact related to COVID-19 is increased rates of stress or anxiety with the possibility of increased levels of other mental health issues such as loneliness and depression. The current study focuses on the variables that are associated with depression, anxiety, and stress during the total lockdown in Kuwait due to the COVID-19 pandemic.

The findings of the current study revealed differences among males and females with respect to depression, anxiety, and stress during the lockdown. Males had a greater likelihood of experiencing depression, anxiety, and stress than females during this period. The current study does not support the findings of Ahmed et al. (2020) and Huang & Zhao (2020), the latter of which found no significant differences between gender and depressive symptoms.

Wang C. et al. (2020) stated that females have higher levels of stress, anxiety, and depression. In addition, Ahmed et al. (2020) found no significant difference between gender and anxiety, depression, and mental wellbeing. Ahmed et al. (2020) explained that males and females have similar concerns about COVID-19. The current study's results could be related to many factors. For example, there are expected male roles in which the male has to protect the family and provide for its needs from outside the home. In addition, Diwaniyyahs, traditional gathering places in Kuwait where men spend much of their time (Al-Sejari, 2018), and where women are not allowed, are closed during the lockdown, so men are staying at home with their families. Diwaniyyah is an important part of men's social activities and daily lives, so the closure of these places and being forced to stay home could affect their mental health, which may lead to depression, anxiety, and stress.

Another finding of the current study was that there are differences between nationality and depression, anxiety, and stress, during the lockdown in Kuwait. The findings showed that Kuwaitis had a greater likelihood of experiencing depression, anxiety, and stress than non-Kuwaitis during this pandemic. This could be related to social isolation and concerns for national security. For instance, social relations among Kuwaiti have changed due to the lockdown so they are unable to visit their extended families, relatives, and friends as they live in separate houses. However, non-Kuwaitis typically do not have their family with them in Kuwait anyway and they live in buildings where they can gather with their neighbors. A further reason for this result could be related to national security. Also, Kuwaitis could be worried about the effects of COVID-19 on their country, especially from an economic aspect, while non-Kuwaitis can return to their countries, which may be less affected by the pandemic.

The findings of the study revealed that there are differences between age and depression, anxiety, and stress, during the lockdown in Kuwait. The results showed that individuals who were 50 and above had a greater likelihood of depression, anxiety, and stress than the other age groups. These results were expected because older people are at highest risk from COVID-19. Meng et al. (2020) reported that “37.1% of the seniors during COVID-19 experienced depression and anxiety” (p.1), which supports the results of the current study. Also, this age group had married children whom they are unable to see due to the lockdown.

Other results showed that there are differences between marital status and depression, anxiety, and stress, during the lockdown in Kuwait. Participants who were widowed had a greater likelihood of depression and stress than the other marital status groups. This group is already without their life partner with whom they would normally share feelings and fears, therefore they are more vulnerable. Also, participants who were married had a greater likelihood of anxiety than the other marital status groups. However, Lei et al. (2020) found in their study that participants who were divorced or widowed had more anxiety and depression than the other groups. Furthermore, the majority of widowed participants in the current study were in the 50 and above age group and that could explain their high levels of depression and stress.

In addition, the results showed that there are differences between occupation and depression, anxiety, and stress, during the lockdown in Kuwait. Businessmen had a greater likelihood of experiencing depression, anxiety, and stress than the other occupational groups. This could be due to loss of income during the shutdown and fear of losing their business due to the global economic crisis, which could affect their future and their financial security.

Furthermore, the results showed that there are differences between educational levels and depression, anxiety, and stress during the lockdown in Kuwait. Participants with a higher educational level had a greater likelihood of depression, anxiety, and stress than the other educational groups. This finding did not support that of the study by Wang C. et al. (2020), who demonstrated that individuals with no formal education experienced higher levels of depression during the COVID-19 pandemic. However, the current study found that the higher the educational level, the greater the likelihood of depression, anxiety, and stress.

Overall, the total lockdown and social isolation during the COVID-19 pandemic may have many repercussions on the psychological wellbeing of individuals (Brooks et al., 2020; Shigemura et al., 2020). The Kuwaiti government was enforcing a total lockdown in Kuwait at the time of the study as a precautionary measure to constrain the spread of the disease. Therefore, we were able to measure the greater likelihood of a significant effect of the lockdown on individuals' mental health, such as depression, anxiety, and stress, among particular populations such as males, the elderly, businessmen, individuals exposed to violence, and the widowed who participated in this study.

Limitations, Recommendations, and Future Research

One of the limitations of the current study is the use of a non-random sample, which limits generality. The advantages of an online survey are saved time and effort, lower costs, and the ability to reach populations in different geographic areas. However, the limitations of the online survey also led to sampling issues and limited access.

Future research could look for the reasons behind the emergence of mental health problems among this population. In addition, future research could investigate other mental illnesses that may

be associated with the COVID-19 pandemic such as aggression, loneliness, and suicidal thoughts. It would also be feasible to investigate mental illness among different populations, such as health workers who were exposed to danger on a daily basis and victims of COVID-19, to see the impact of the experience.

The findings of the study revealed that the risk factors associated with higher levels of depression, anxiety, and stress among the population are: being male, being elderly, having a high level of education, and being businessmen. Therefore, social workers and mental health professionals need to pay close attention and monitor these populations who are at high risk of mental illness during the COVID-19 pandemic. In addition, they need to provide interventions for individuals who are exposed to these mental health problems. There is a need for training programs to teach social workers and mental health professionals how to help individuals, communities, and society during the COVID-19 pandemic, especially populations who are at risk of experiencing mental health problems. In addition, the Kuwaiti government should give more attention to the mental health illness that people suffered from during the pandemic and make this issue its highest priority. The Kuwaiti government should provide financial and logistical support to psychiatric institutions which offer help to people who are suffering from psychological problems during the COVID-19 pandemic. Furthermore, during the lockdown people such as males, elderly, a high level of education, and businessmen who are at high risk of experience depression, anxiety, and stress during the pandemic need to talk to professional about their feelings, so it is necessary to provide a hotline which offer psychological help. The government should provide financial support for research which are studying the impact of the Covid-19 pandemic on mental health of individuals in Kuwaiti society.

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Prof. Lubna A. Alkazi, Professor at Kuwait University, Department of Sociology and Social work. Ph.D in Sociology from University of Texas at Austin, USA (1984). Areas of research are demography, gender studies, family and social problems.

E-mail: dr_alkazi@hotmail.com

Prof. Hend B. Al-Ma'seb, Professor at Kuwait University, Department of Sociology and Social Work. Ph.D in social work from Ohio State University, USA (2006). Research interest in clinical social work and social work interventions and therapies.

E-mail: hendbatel@hotmail.com

Prof. Maha M. Al-Sejari, Professor at Kuwait University, Department of Sociology and Social Work. Ph.D in Medical Anthropology from Ohio State University, USA (2005). Research interest in biocultural anthropology and population health.

E-mail: huna1973@hotmail.com

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