

Psychological Effects of Coronavirus in Saudi Arabia: A Comparative Study of Saudi and International Students at Saudi Universities

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Abstract

The current study aimed to determine the level of psychological effects resulting from the Corona virus (COVID-19) among university students in the Kingdom of Saudi Arabia, and to identify the differences in the psychological effects resulting from the COVID-19 according to a number of demographic variables (age, gender, nationality, subject of study, accommodation, marital status). To achieve the objectives of the study, the Depression Anxiety and Stress-21 scale was used. After verifying its psychometric properties, the sample of the study consisted of (429) male and female students, who were randomly selected. The results indicated that the most common psychological effects resulting from the COVID-19 among university students were psychological stress, with a mean (5.8298), followed by depression (5.0583), and by anxiety (3.822). The results of the study showed that there were statistically significant differences at the level of (0.05) in all dimensions of the scale of psychological effects resulting from COVID-19 and the overall score of the scale. According to demographic variables (age, type, nationality, subject, marital status, accommodation).

Keywords: Psychological effects • Corona virus • Depression • Anxiety • Stress • Saudi students • International students

Introduction

'Coronavirus' has become a familiar medical term now even to non-scientists. These viruses are named for the thorns that project from their surfaces, like a crown or the sun's corona. Studies revealed that they can infect both animals and people, and can cause respiratory diseases [1]. A novel respiratory virus, COVID-19 was first reported in Wuhan, China, on 31st December, 2019 and rapidly spread to six continents. Millions of people have been infected with this virus, and the extensive spread of COVID-19 was called a pandemic by the World Health Organization on 11th March. As of 16th July 2020, there were 13,285,640 confirmed cases, diagnosed with COVID-19 and 578,110 deaths in 216 countries, territories or areas.

COVID-19 is possibly spreading through close contact from person-to-person. Studies also reveal that some people without symptoms may be able to spread the virus. Research is underway about how the virus spreads and the severity of illness it causes. Studies related to the COVID-19 pandemic suggest that this virus is spreading more powerfully than influenza, but not as efficiently as measles, which is highly contagious. In general, when people closely interact with others and spend an extended time together, there is a higher risk of spread of this virus. The virus spread at an alarming rate to 210 countries and territories around the world. For instance, over 2,376,064 confirmed cases are reported in the United States of America, and over 121,645 deaths. Europe has reported over 2,619,753 cases diagnosed with COVID-19, and over 175,456 patient deaths.

As a pandemic, COVID-19 poses a global threat as it represents the largest prevalence of a typical pneumonia since the outbreak of the Severe Acute Respiratory Syndrome (SARS) in 2003 [2]. From the Chinese city of Wuhan, its spread to other countries in the world has created a state of panic and fear, bringing the world into a complete lockdown. It also resulted in food shortage and scarcity of medical facilities all over the world [3]. The World Health Organization (WHO) announced to the world that COVID-19 is an infectious disease and people may experience mild to moderate

respiratory illness and recover without requiring special treatment.

Over the last six months, the number of patients infected with COVID-19 infections has shown a significant increase all over the world. Many of these cases have severe respiratory symptoms which result in death of many people. China is not only the country with the largest population in the world but also has the largest ageing population. In 2017, China had 241 million adults over 60 that represented 17.3% of the total population. In 2020, China's population now is 1,439,222,234 which is equivalent to 18.47% of the total world population. About 250 million adults are over the 60. Moreover, 30 million Chinese people were over 80 years of age, and 40 million are disabled who required long term care and attention.

Saudi Arabia is one among the countries that has the lowest number of COVID-19 reported cases of death and critically ill patients. This is partly because of the precautions and adequate measures taken in advance by the Saudi government before the rapid outbreak of the virus. Firstly, they suspended schools, shut down holy mosques and other public amenities like parks, shopping malls, barber shops etc. This was done at an early stage before the virus spread, unlike what happened in other countries. In addition, they have cancelled both international and domestic flights, coming to and from Saudi airports. Secondly, the government has provided medical care to all affected patients, including residence violators, and placed possible cases in quarantine at hotels, to stop them from spreading the virus. In addition to that, they provided facemasks, sanitizers, and gloves to all the people to help protect them from this virus. Thirdly, the government has made sure that there is adequate supply of basic medical products like medicine, health care stuff, and personal protection equipment. Importantly, they have set up curfew all over the Kingdom to ensure social distancing. Social gatherings were also restricted as a preventive measure. These are probably the main reasons why there is a considerably lower rate of 178,504 cases diagnosed with the virus and 1511 deaths reported in Saudi Arabia which as a population of Williams [4] identifies that in two communications published in Lancet Psychiatry, experts drew attention to

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patient populations that may need personalised interventions, and these are older adults and international migrant work force [5]. The observations in Williams study are applicable to the country of Saudi Arabia having the largest migrant workforce.

The study reported here was carried out rapidly in 2020 find out the psychological effects of the COVID-19 pandemic on male and female students in Saudi universities. The results of the study will inform the development of support programs by psychological service centres that assist students to recover from these effects.

Therefore, the introduction concludes the problem in the following questions;

1. What are the most common psychological effects among university students in the Kingdom of Saudi Arabia?

2. What are the differences between study members on the scale of psychological effects resulting from the COVID-19 according to demographic variables (age, gender, nationality, subject of study, accommodation, marital status)?

Aims of the study

1. Determine the level of psychological effects resulting from the COVID-19 among university students in the Kingdom of Saudi Arabia.

2. Identify the differences in the psychological effects resulting from the COVID-19 according to a number of demographic variables (age, gender, nationality, subject of study, accommodation, marital status).

Methodology

Study design and participants

This study was distributed to Saudi and international students in Saudi governmental universities through the Deanship of Student Affairs. Sampling was done by sending questionnaires in electronic format to students which includes the information electronic sheet and consent form. Depression Anxiety and Stress-21 (DASS-21) was the measure used. The researcher translated the questionnaire into Arabic, as all the participants would be Arabic speakers. The Arabic version was first sent to five professors in the psychology department to check the validity and authenticity of the instrument and to make sure of the items are understood linguistically and suit for the study sample. After that, the scale was applied to 42 students as an exploratory sample to exhibit the psychometric properties of the scale and ensure that the statements are related to the dimensions. The psychometric properties of the scale were confirmed by assessing the validity and reliability of the scale and calculating the correlation coefficients, which were found to be of a significant level mostly at (0.01) and appropriate for the current study. An electronic version of the scale was then distributed among students through deans of the student affairs at Saudi universities. Both Saudis and non-Saudis, including other Arab nationals, participated

in this study. The study sample included undergraduate and post-graduate students of both genders from different academic disciplines. The rationale and methodology of this study was communicated with the participants of this study through deans of student affairs. More than four hundred students were willing to respond by reading the message that was sent with the electronic version, which explained what the scale is about and what is it for. For those who agreed to participate in the study, they then completed the electronic version.

Data collection and proceedings

Data was collected within a time period of three weeks during the outbreak of COVID-19 that occurred not only in Saudi Arabia but also in most of the countries of the world in the beginning of April 2020. The process of data collection was completed in the following manner. Students received a message, which included three parts. First, it explained why the researcher is doing the study that comprised of the objectives and aims of this research. This part gave students an overview of this study, which helped them to decide if they really want to complete the questionnaire or not. Second, for those who decided to complete the questionnaire had to fill out their personal information (demographic variables) that included age, gender, nationality, subject of study, accommodation, marital status. When students answered all these questions, they were allowed to answer the DASS-21 questionnaire that is divided into three axes: Depression, Anxiety and Stress. To achieve the aims of the study, the researcher used the descriptive approach (relational-comparative).

The study sample consisted of 429 male and female students, from various governmental Saudi universities. Table 1 illustrates the distribution of questionnaire among members of the study, according to their demographic variables including age, type, nationality, accommodation and living status.

The DASS-21 scale is divided into three axes (Stress, Anxiety, and Depression). The researcher has confirmed the validity and reality through the following methods: first, using reality of the arbitrators: The researcher presented a tool to a number of specialists in the Psychology department, confirming the translation of the tool into Arabic, and its suitability for using the study sample. Second, validity of correlation coefficient: Correlation coefficients were measured between the paragraph and its dimension as well as with the total score of the exploratory sample (n=42) as in Table 2.

It is clear from Table 2 that most of the correlations between items and dimensions are statistically significant at the set level of significance (0.05), and therefore the items have good reliability T.

Table 3 shows the coefficients of internal consistency from the exploratory sample data (n=42). It is evident from the table that the coefficient of internal consistency ranged from 0.72 to 0.83, while the coefficient of half-fragmentation stability ranges from 0.80 to 0.94, indicating that the scale is suitable for the current study.

Table 1. Demographic data for participants.

Variables	Category	No. of Participants	Percentage
Age	From 18 to less than 25	237	55.2%
	From 25 to less than 35	135	31.5%
	From 35 and over	57	13.3%
Gender	Male	236	55.0%
	Female	193	45.0%
Nationality	Saudi	240	55.9%
	Non-Saudi	189	44.1%
Subject	Humanities	86	20.0%
	Religious science	225	52.4%
	Applied and health science	118	27.5%
Accommodation	In university	147	34.3%
	Out of university	282	65.7%
marital status	Single	258	60.1%
	Married	171	39.9%

Table 2. Correlation coefficients of the scale.

Axes	No. of Items related to the axes	Item	Correlation with	
			axe	Whole tool
Stress	1	I found it hard to wind down	.538**	.415**
	6	I tended to over-react to situations	.329*	.300
	8	felt that I was using a lot of nervous energy	.618**	.678**
	11	I found myself getting agitated	.614**	.618**
	12	I found it difficult to relax	.635**	.519**
	14	I was intolerant of anything that kept me from getting on with what I was doing	.472**	.348*
	18	I felt that I was rather touchy	.621**	.524**
Anxiety	2	I was aware of dryness of my mouth	.666**	.485**
	4	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	.522**	.297
	7	I experienced trembling (e.g., in the hands)	.636**	.548**
	9	I was worried about situations in which I might panic and make a fool of myself	.751**	.678**
	15	felt I was close to panic	.534**	.476**
	19	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	.439**	.355**
	20	I felt scared without any good reason	.395	.234
Depression	3	I couldn't seem to experience any positive feeling at all	.428**	.442**
	5	I found it difficult to work up the initiative to do things	.572**	.402**
	10	I felt that I had nothing to look forward to	.650**	.645**
	13	I felt down hearted and blue	.619**	.506**
	16	I was unable to become enthusiastic about anything	.693**	.543**
	17	I felt I wasn't worth much as a person	.538**	.415**
	21	I felt that life was meaningless	.329*	.300

Note: **significant at the level (0.05)

Table 3. Internal consistency and Half-fragmentation of the scale.

Axe	No. Items	Internal consistency	Half-fragmentation
Stress	7	0.72	0.8
Anxiety	7	0.73	0.92
Depression	7	0.72	0.88
Total	21	0.83	0.94

Results

To answer the first study question relating to the most common psychological effects among university students in the Kingdom of Saudi Arabia, the mean and standard deviations are calculated as follows:

It is clear from Table 4 that the arithmetic averages of mean and standard deviations for the scale of psychological effects resulting from the Corona pandemic were different, as for mean, stress came in the first place (5.8298), and in second place depression was (5.0583), while anxiety was in third place (3.8322). The overall average for the scale was (14.7203). But in standard deviation depression came in the first place (4.30430), and in second place stress (4.13741), while anxiety was in third place (3.93579). The overall average for the standard deviation scale was (11.04371).

To answer the second study question, on the differences between study members on the scale of psychological effects resulting from the COVID-19 is made according to demographic variables including age, gender, nationality, subject of study, accommodation, marital status were used according to demographic variables, as shown in the following.

Differences according to age

In order to discover the differences in the psychological effects of the pandemic of demographic variables (age), a test used to mono-variance analysis (one-way ANOVA) as follows;

There were statistically significant differences at the level of (0.05) in all dimensions of the psychological effects scale, resulting from the pandemic.

To find the direction of the differences between the averages of the study members, the researchers used one of the successive tests, which is the test of the least Significant Difference (LSD). The results found according to the following (Table 5).

It is clear from Table 6 that the differences in the first and second dimensions and the overall degree of the tool came in favour of the age group from 18 to less than 25. It was followed by a category more than 35 years, while in the third dimension; the differences came in favour of the age group from 18 to less than 25. It was again followed by the age group of (25) to less than 35. The final category belonged to the age group of 35 years and over.

Differences were found according to the gender

To detect the differences in the psychological effects of the pandemic according to demographic variables (type), the (t) test was used as follows (Table 7).

It is clear from the table above that there are statistically significant differences at the level of significance (0.05) in all dimensions of the scale of psychological effects, resulting from the pandemic, and in favour of females compared to males.

Differences according to the nationality

In order to reveal the differences in the psychological effects of the pandemic according to demographic (nationality) variables, a test (t.test) was used as follows (Table 8).

Table 4. Means and standard deviations of the scale.

Axes	Mean	Std. Deviation
Stress	5.829	4.13741
Anxiety	3.8322	3.93579
Depression	5.0583	4.3043
Overall score	14.7203	11.04371

Table 5. Results of the ANOVA test according to the age (n=429).

Variable	Inclusion	Sum of Squares	MF	Mean Squares	F	Sig.
Stress	Between Groups	449.649	2	224.824	14.7203	14.7203
	Within Groups	6876.929	426	16.143		
	Total	7326.578	428			
Anxiety	Between Groups	300.714	14.7203	150.357	10.120	.000
	Within Groups	6329.202	426	14.857		
	Total	6629.916	428			
Depression	Between Groups	196.515	2	98.258	5.413	.005
	Within Groups	7733.028	426	18.153		
	Total	7929.543	428			
Overall	Between Groups	2575.285	2	1287.643	11.054	.000
	Within Groups	49625.148	426	116.491		
	Total	52200.434	428			

Table 6. Value of the Least Significant Difference (LSD) according to the age.

Variable	Age	From 18 to less than 25	From 25 to less than 35	From 35 and up
Stress	From 18 to less than 25		2.14684*	-.32982-
	From 25 to less than 35	-2.14684-*	-----	-.32982-
	From 35 and up	-1.81701-*	.32982	-----
Anxiety	From 18 to less than 25		1.85251*	.33711
	From 25 to less than 35	-1.85251-*	-----	-1.51540-*
	From 35 and up	-.33711-	1.51540*	-----
Depression	From 18 to less than 25	-----	1.32593*	1.43860*
	From 25 to less than 35	-1.32593-*	-----	.11267
	From 35 and up	-1.43860-*	-.11267-	-----
Overall	From 18 to less than 25		5.32527*	3.59272*
	From 25 to less than 35	5.32527*		-1.73255-
	From 35 and up	-3.59272-*	1.73255	

Note: **significant at the level (0.05).

Table 7. The (t.test) results according to gender (n=429).

Variable	Type	No. of participant	Mean	Std. Deviation	T	Sig.
Stress	Male	236	4.7331	3.89773	-6.344-	.000
	Female	193	7.1710	4.03459		
Anxiety	Male	236	3.0254	3.51764	-4.815-	.000
	Female	193	4.8187	4.19614		
Depression	Male	236	4.1653	3.99071	-4.877-	.000
	Female	193	6.1503	4.43039		
Overall	Male	236	11.9237	10.23066	-6.035-	.000
	Female	193	18.1399	11.06355		

Table 8. The (t.test) results according to nationality (n=429).

Variable	Nationality	No. of Participant	Mean	Std. Deviation	T	Sig.
Stress	Saudi	240	6.6625	4.07342	4.818	.000
	Non	189	4.7725	3.98349		
Anxiety	Saudi	240	4.4750	4.17095	3.874	.000
	Non	189	3.0159	3.45715		
Depression	Saudi	240	5.7125	4.40576	3.597	.000
	Non	189	4.2275	4.03259		
Overall	Saudi	240	16.8500	11.22061	4.606	.000
	Non	189	12.0159	10.22069		

It is clear from the Table 8 that there are statistically significant differences at the level of significance (0.05) in all dimensions of the psychological effects scale. It is resulting from the pandemic and in favour of Saudi nationality compared to non-Saudi nationalities.

Differences according to the of subject of study

To identify the differences in the psychological effects of the pandemic of demographic variables subject of study, a test was used to use the mono-variance analysis test (on way nova) as follows (Table 9).

It is understood from the table that there are statistically significant differences at the level (0.05) in all dimensions of the psychological effects scale, resulting from the pandemic. To discover the direction of differences between the averages of members of the study, the researcher used one of the successive tests. It is the test of the Least Significant Difference (LSD), and the results came according to the following (Table 10).

It is evident from the table that the differences in all dimensions and the overall score of the tool came in favour of the students who specialize in health and applied sciences. It is followed by those in the humanities and the last category came from those in the Sharia (religious) sciences.

Differences according to the variable of accommodation

To distinguish the differences in the psychological effects of the

pandemic according to the demographic variables (accommodation), the test (t.test) was used as follows (Table 11).

It shows the results of the test (t.test) to indicate the differences between the average scores of the study members on the psychological effects scale resulting from the pandemic, according to the variable of the accommodation (inside the university, outside the university (n=429)).

From the Table 11, it is understood that there are statistically significant differences at the level of significance (0.05) in all dimensions of the psychological effects scale. It is resulting from the pandemic and in favour of those who live outside the university, compared to those who live inside the campus.

Differences according to the variable of marital status

To show the differences in the attitudes of students with disabilities towards the practices of activities according to demographic variables (marital status), a test (t.test) was used as follows (Table 12).

It is evident from the Table 12 that there are statistically significant differences at the level of significance (0.05) in all dimensions of the scale of psychological effects, resulting from the pandemic and in favour of the group of those in a social condition (single, compared to those in the married category).

Table 9. Results of the ANOVA according to subjects (n=429).

Variable		Sum of Squares	MF	Mean Squares	F	Sig.
Stress	Between Groups	338.575	2	169.287	10.320	.000
	Within Groups	6988.003	426	16.404		
	Total	7326.578	428			
Anxiety	Between Groups	231.797	2	115.899	10.320	.000
	Within Groups	6398.119	426	15.019		
	Total	6629.916	428			
Depression	Between Groups	193.317	2	96.659	10.320	.000
	Within Groups	7736.226	426	18.160		
	Total	7929.543	428			
Stress	Between Groups	2237.219	2	1118.609	10.320	.000
	Within Groups	49963.215	426	117.285		
	Total	52200.434	428			
Overall	Between Groups	2237.219	2	1118.609	9.538	.000
	Within Groups	49963.215	426	117.285		
	Total	52200.434	428			

Table 10. The value of the least significant difference (LSD) according to subject of study.

Variable	Subject of Study	Humanities	Religious Science	Applied and Health Science
Stress	Humanities		.56708	-1.51951*
	Religious science	-.56708-		-2.08659*
	Applied and health science	1.51951*	2.08659*	
Anxiety	Humanities		.55788	-1.17225*
	Religious science	-.55788-		-1.73013*
	Applied and health science	1.17225*	1.73013*	
Depression	Humanities		.81240	-.74635-
	Religious science	-.81240-		-1.55876*
	Applied and health science	.74635	1.55876*	
Overall	Humanities		1.93736	-3.43812*
	Religious science	-1.93736-		-5.37548*
	Applied and health science	3.43812*	5.37548*	

Note: **significant at the level (0.05).

Table 11. The (t.test) results according to accommodation (n=429).

Variable	Accommodation	No. of Participant	Mean	Std. Deviation	T	Sig.
Stress	In University	147	4.4762	3.79678	-5.030-	**.000
	Out of university	282	6.5355	4.13825		
Anxiety	In University	147	2.7687	3.50942	-4.115-	**.000
	Out of university	282	4.3865	4.03670		
Depression	In University	147	3.8776	3.89221	-4.180-	**.000
	Out of university	282	5.6738	4.38616		
Overall	In University	147	11.1224	10.10689	4.606	**.000
	Out of university	189	16.5957	11.06305		

Note: **significant at the level (0.05).

Table 12. The (t.test) results according to marital status (n=429).

Variable	Marital Statuses	No. of Participant	Mean	Std. Deviation	T	Sig.
Stress	Single	258	6.5620	4.09304	4.818	**.000
	Married	171	4.7251	3.96609		
Anxiety	Single	258	4.4767	4.09344	3.874	**.000
	Married	171	2.8596	3.47650		
Depression	Single	258	5.6318	4.44159	3.597	**.001
	Married	171	4.1930	3.94568		
Overall	Single	258	16.6705	11.05399	4.606	**.000
	Married	171	11.7778	10.38538		

Note: **.05 significant at the level (0.05).

It is clear from the Table 8 that there are statistically significant differences at the level of significance (0.05) in all dimensions of the psychological effects scale. It is resulting from the pandemic and in favour of Saudi nationality compared to non-Saudi nationalities.

Differences according to the of subject of study

To identify the differences in the psychological effects of the pandemic of demographic variables subject of study, a test was used to use the mono-variance analysis test (on way nova) as follows (Table 9).

It is understood from the table that there are statistically significant differences at the level (0.05) in all dimensions of the psychological effects scale, resulting from the pandemic. To discover the direction of differences between the averages of members of the study, the researcher used one of the successive tests. It is the test of the Least Significant Difference (LSD), and the results came according to the following (Table 10).

It is evident from the table that the differences in all dimensions and the overall score of the tool came in favour of the students who specialize in health and applied sciences. It is followed by those in the humanities and the last category came from those in the Sharia (religious) sciences.

Differences according to the variable of accommodation

To distinguish the differences in the psychological effects of the pandemic according to the demographic variables (accommodation), the test (t.test) was used as follows (Table 11).

It shows the results of the test (t.test) to indicate the differences between the average scores of the study members on the psychological effects scale resulting from the pandemic, according to the variable of the accommodation (inside the university, outside the university (n=429)).

From the Table 11, it is understood that there are statistically significant differences at the level of significance (0.05) in all dimensions of the psychological effects scale. It is resulting from the pandemic and in favour of those who live outside the university, compared to those who live inside the campus.

Differences according to the variable of marital status

To show the differences in the attitudes of students with disabilities towards the practices of activities according to demographic variables (marital status), a test (t.test) was used as follows (Table 12).

It is evident from the Table 12 that there are statistically significant differences at the level of significance (0.05) in all dimensions of the scale of psychological effects, resulting from the pandemic and in favour of the group of those in a social condition (single, compared to those in the married category).

Discussion

Since China had first announced the epidemic, the number of confirmed cases, suspected cases, recovered individuals, and deaths related to

COVID-19 has continued to increase, spreading across to all countries in the world. The numbers had a sharp increase in the number of suspected cases since January 2020. Children, people suffering with other respiratory diseases and the aged have been particularly susceptible to the virus. Four hundred and twenty nine participants completed the questionnaire including both male and female students from various governmental Saudi universities. Demographic variables included age, type, nationality, subject, marital status, accommodation. Depression Anxiety and Stress-21 (DASS-21) was used for this purpose. The researcher illustrates as shown in the Table 4 that individuals of the current study suffer from psychological, social and life problems. This may be due to their weakness of experience and skills in following a specific strategy to face stress, which is the most prevalent among group's university students in particular. In the circumstances of the COVID-19 and the resulting decisions represented by the feeling of psychological stress, and its effects on all sides [6]. In addition, the younger group of the sample was affected by COVID-19 more than other groups, which may be means that they did not care about the instructions provided by the Ministry of Health to protect them from the virus. Moreover, they are distinguished by their desire for social interaction, periodic meetings with friends, and social interaction [7].

In terms of gender, the results showed that females were a affected by COVID-19 more than males since women are different from men in emotional characteristics, which represented in response to fears and frustrating feelings, accuracy of thinking in details, increasing sickness concerns, transmission of infection, and anxiety [8]. They also think more about others, such as brothers, children and spouses, and suffer from emotional responsibility, and lack of stamina. They lack the skills of dealing with stress, and the skills of social interaction (if you are going to make this strong claim, you should give some references), which is reflected in their ability to cope with the psychological effects resulting from the COVID-19. It can also be said that physiological and hormonal changes in females have a role in increasing the severity of these effects, such as mood swings [9].

There were differences in the psychological effects between the study's participants according to nationality. Saudi students were more anxious than other nationalities. The source of this fear is may be related to their social relationships and interaction with others such as their children, parents. Some of those who have social relations and suffer from chronic diseases, especially after the World Health Organization announced an increase in deaths resulting from the pandemic in some of these groups in particular [10]. Furthermore, non-Saudi students were taken care by the universities providing health, psychological and social services. The universities administration provides them with preventive programs represented by health prevention and psychological and social support directly which reduced the size of the psychological effects they had. Its intensity increased among Saudi students to increase their social participation and periodic meetings, which reflected in the increase of the psychological effects resulting from the pandemic compared to other nationalities.

Results

The psychological effects were higher among applied and health science compared with students in other faculties, as this group, due to their specialization, was more knowledgeable about epidemic. Whereas, those with religious science were less affected, perhaps due to their satisfaction about their behaviours that they undertake, which may reflect the absence of anxiety and fear [11]. It was clear that singles were more affected compared to those who were married. Single people are more anxious about the future, less able to deal with stress, and do not possess the basic skills in facing these effects. It can also be said, that married people have more access to psychological and social support, and they are the highest degree in psychological and social stability, and they have higher skills than others do in dealing with the psychological effects of this pandemic [12]. As the COVID-19 epidemic continues to spread, the findings of this study suggest significant guidance for the development of a psychological and mental support system in KSA. It is important to prepare healthcare systems and the general public to be medically and psychologically prepared to avoid the widespread transmission of this virus. It also reminds people to prioritize personal and social hygiene. As WHO declared that the pandemic will have an extended prevalence than initially expected, medical experts both globally and locally have advised the general public to consider the virus similar to any other infectious and fatal virus. Our socio demographic data suggest that female suffered a greater psychological impact of the outbreak as well as higher levels of stress, anxiety, and depression. This finding parallels to previously extensive epidemiological studies, which found that women were at higher risk of stress. Students were also found to experience a psychological impact of the outbreak and higher levels of stress, anxiety, and depression. During the epidemic, education authorities have adopted online portals and web-based instruction for delivering lectures in an unobstructed manner. Online platforms could also provide a support network for those people spending most of their time at home during the epidemic. We found that the public with no formal education had a greater likelihood of stress during the epidemic.

Conclusion

Saudi Arabian Government has extended immense support for the treatment of COVID-19 patients and has taken keen attention of the mental health of its residents. It is one of the few safest countries in the world with excellent support being given to people of all age groups and nationalities with state-of-the-art medical support. As a result, the general population is well aware of the importance of social distancing, personal hygiene and take

adequate measures to fight against this infectious disease. The Ministry of Health is playing an important role to ensure the safety and security of all people in this country. As part of this study, mental health status was measured using the Depression, Anxiety and Stress Scale (DASS-21). This study conducted based on the demographic variables including age, type, nationality, subject, marital status, accommodation.

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