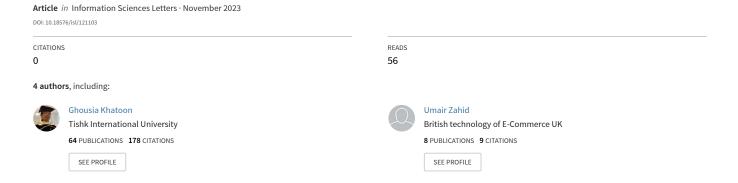
# COVID 19 and its Impact on the Mental Health of Women Professionals -An Empirical Study in Jeddah Kingdom of Saudi Arabia



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# COVID 19 and its Impact on the Mental Health of Women Professionals – An Empirical Study in Jeddah Kingdom of Saudi Arabia

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Abstract: This research study is aimed to investigate the impact of COVID 19 on the mental health of working women professionals in Jeddah, Saudi Arabia. The study adopted a quantitative descriptive analysis research design that was applied on a sample of 322 respondents who were selected using simple random sampling. The study utilized a three-domain questionnaire and 37 items to collect data. The three domains were: "Emotional and Health Domain, "Functional and Thinking Activity Domain" and "Social Domain". Findings revealed that the COVID 19 had moderately impacted the mental health of the Women professionals in all three Domains. The Study recommended taking certain measures to enhance people's mental health, such as staying engaged in activities that alleviate the individual's mental stress. Recommendations include avoiding exposure to media, staying in touch with family and friends, getting enough sleep, ensuring physical fitness.

Keywords: COVID 19, Mental Health, Women Professionals, Wellbeing.

#### 1 Introduction

The COVID 19 Pandemic has caused mayhem across the world. It has taken away the mental peace of the people and has hindered all the sectors of the economy significantly. All the activities of primary, secondary, and tertiary sectors have been jeopardised. As the saying goes, "Health is wealth". It has exacerbated problems such as unemployment, depression, financial crisis, fear, insomnia, anxiety, stress, etc. Amongst all these, health is the major concern. Working women manage both family and profession. Their sufferings have a great negative impact on the family members who are dependent.

"No health without mental health"; this is how WHO perceives the importance of addressing the various mental health problems. According to WHO, in most parts of the world, mental health is not given the same importance as physical health and mental health disorders are not linked to disability and mortality the way physical disorders are (Prince, et. al, 2007). Nevertheless, mental health disorders have great impact on people's health, as it comprises a fundamental element of their health (Saxena, et. al, 2007). In this regard, Prince, et. al (2007) declared that depression and other widespread mental disorders are the cause of 14% of global diseases, a percentage that should leverage the significance of focusing on mental disorders and of their effect on the public health. Mental health and its respective problems could affect all segments and aspects of a society and constitute a major challenge to global development as mental health is crucial to the overall well-being of individuals, societies, and countries (WHO 2003).

The immense contribution of Women Professionals towards their families, their profession and towards their society cannot be denied. Thus, the crux of this research paper is to make an attempt to study the impact of the COVID 19 pandemic on the mental health of the women professionals in Jeddah, Kingdom of Saudi Arabia. The study aims to answer the following research questions:

Research question 1: What is the impact of COVID 19 on the Emotional and Health Domain of women professionals in Jeddah, KSA?

Research question 2: What is the impact of COVID 19 on Functional and Thinking Activity Domain of women



professionals in Jeddah, KSA?

Research question 3: What is the impact of COVID 19 on Social Domain of women professionals in Jeddah, KSA?

To answer these research questions, statistical tools such as the Pearson Correlation factor, Mean, Standard Deviation, Chi Square Test and ANOVA were used. The findings of this study would contribute to overcoming or reducing the mental health problems that were caused by COVID 19 pandemic and its consequences, of professional women in Jeddah, KSA.

#### 1.1 Review of the Literature

The Study titled 'Mental Health and Work Attitudes among People Resuming Work during the COVID-19 Pandemic: A Cross-Sectional Study in China', has focussed on the factors responsible for the mental health of the employees as a result of COVID 19. One of the major findings of the Study according to this research is the fear of unemployment which led to anxiety, depression, insomnia and somatisation. These factors have affected the mental health of employees. There was a change in the attitude of employees who resumed their jobs after COVID 19. They were content with their current job and there was less employee turnover (Song, et al., 2020). This Study scrutinized the impact of COVID-19 on the mental health of employees. The main objective of this research was to examine the factors which caused psychological distress and depression amongst employees. The study reported that there was an adverse impact of COVID-19 on the mental health of employees. Main factors that contributed to the negative impact on the health of employees were fear of safety, risk of infection, quarantine, incarceration, stigma and societal barring, fear of job safety, and financial distress (Hamouche, 2020). The Study discovered that the health care providers had a high risk of catching infection and physiological distress, because they were in constant contact with infected patients. The study also found out that being a nurse who is also a mother, while having contact with the people infected with SARS had heavy amount of psychological distress (Maunder, 2004). The study indicates that problems such as stress, anxiety, depression, frustration, and uncertainty, took a toll on the mental health of the people, thus the outbreak of COVID 19 alone is responsible for these situations. The study suggested that there is a need to provide health education to people by making use of social media and to provide health care workers with protective facilities (Serafini, et al., 2020).

During Covid-19, the majority of populations were forced to stay inside and mingle only with their households. This ordeal had lasted as long as lockdowns were enforced. In an interesting study called "The Implications of COVID-19 for Mental Health and Substance Abuse", very significant statistics were encountered and found, that in turn illustrates a clear picture. This study found that the average share of adults that reported symptoms of anxiety disorder and/or depressive disorder differed dramatically from the statistics found during the pre-pandemic era. According to the National Health Interview Survey or the NHIS, 11% of adults reported symptoms of either depressive and/or anxiety ridden disorders, from January until June of the year 2019 (NHIS, KFF, CDC, 2019). In 2021, The Census Bureau's Households Pulse Survey published its findings, whereby it indicated that more than 41% of all adults suffered from either anxiety or depressive disorders, or both (Household Pulse Survey, CDC, KFF, 2021). This is an alarming increase on average from statistics and findings prior to the Covid-19 Pandemic and the world humanity had to endure during as well as after.

High levels of anxiety and/or depressive disorders has an impact on job safety and security and is considered a major factor in its correlation to job loss. According to data from previous economic downturns, loss of employment or lack of job security is connected to increased levels of depression, anxiety, distress, and low self-esteem, as well as higher incidences of substance abuse disorders, and suicide ideation. Due to the pandemic, there were periods of mass unemployment and lower wages, because of Covid-19 restriction rules as well as an overall lower aggregate demand for goods and services. This proved to be a significant burden on the mental health of adults. This is followed by some critical findings, such as an overall of 53% adults who suffered unemployment or a lower wage, reported higher rates of harmful symptoms of mental health than adults who didn't suffer any job or monetary income loss, which was reported at around 32% (Household Pulse Survey, KFF, 2020).

Even though both, men and women alike, are confronted with the pandemic, women tended to bore a bigger share of the brunt in terms of suffering from mental health illnesses such as anxiety and/or depressive disorders (KFF, NHIS, Household Pulse Survey, 2020). Interestingly, even to time periods prior to the beginning of the pandemic, women, on average also tended to suffer in higher rates than men from anxiety and/or depressive disorders (KFF, NHIS, NIMH, 2020). On average, women in households with children reported a 49% incidence rate of symptoms from anxiety or depressive disorders, compared to 40% of men (KFF, CDC, Household Pulse Survey, 2020). During the pandemic, ongoing research revealed concerns regarding children's mental health and overall well-being, particularly among mothers, who had to face problems such as long-term suspension of schools and closures of childcare facilities. Women with children unlike males with children are more likely to suffer from anxiety and/or depressive symptoms (KFF, CDC, Household Pulse Survey, 2020).

Generally, mental health among young adults aged between 18 and 24 has always been an increasingly vulnerable aspect in their lives due to their predominant exposure to social media, high workloads, little experience, all whilst constructing their self-identity. Mental health among young adults had been a vital topic of discussion long before the pandemic. It wasn't until the Covid-19 pandemic, along with the international and national restrictive measures which took place, that brought worrying statistics to light. Young adults have also dealt with a myriad of consequences related to the pandemic, including university or college closures, alterations to remote employment or stay-at-home work, and lack the of income or job, all of which are critical factors that may lead to poor mental health (KFF, Household Pulse Survey). This study found that a staggering 56.2% of adults, namely young adults between the ages of 18 and 24 reported symptoms of anxiety and/or depressive disorders. This compared to 48.9% of adults aged between 25 and 49. A significant difference is also found on adults aged between 50 and 64 to have reported their incidences at 39.1%. Senior adults, namely above the age of 65, had the lowest reported rates at 29.3% (KFF, CDC, Household Pulse Survey, 2020).

During epidemics, the most critical concern of public health agencies and the media, typically focuses on the biological and physical impacts of the outbreak, with far less attention paid to mental health concerns. The fact that pandemics pose a threat to mental health is well known. There has been an increase in depression and anxiety cases since the beginning of the 'stay-at-home' order, especially for women professionals. With the strain of mental wellbeing during the COVID-19 pandemic, however, there have been increasing demands for increased assistance for mental health in Jeddah, Kingdom of Saudi Arabia (KSA), especially among women professionals (Arafa, et al., 2021). In China, the National Health Commission released the first detailed emergency psychological crisis management guidance for people affected by COVID-19 on 27 January 2020, emphasizing the need for multi-disciplinary mental health teams to provide people with mental health support (Al Sulais, et al., 2020). Accordingly, recent studies in the KSA, have shown a consistently negative effect of COVID-19 on women workers' mental health, with 16-18% of respondents displaying signs of anxiety and depression (Alkwiese, et al., 2020). Sriharan, et al. (2020) further added that the stay-at-home order is increasing inactivity in people. According to (De Pablo, 2020), the stay-at-home order causes most people to spend a great amount of their time on social media. Spending most of the time on social media is causing stress and depression for women professionals in Jeddah. Women professionals use social media platforms to post about their current situation along with their achievements in life (Arafa, et al., 2021). These factors affect them in emulating their friends and thus comparing themselves with others, and thus a sense of social and lifestyle comparison begins to take hold, negatively contributing to their mental health. Therefore, all the influences that they may encounter in social media could cause a population to report low self-esteem and even difficulty interacting with others. The increasing habit of being on social media platforms makes people feel inadequate, isolated, and even unsatisfied. This effect causes them to witness an increase in signs and symptoms of depression, anxiety and hence, stress. Therefore, women professionals are suffering mentally due to anxiety, fear, and low self-esteem effects in Jeddah, KSA (Muller, et al., 2020). As per the study of Yıldırım and Güler (2020), the stay-at-home order is affecting the mental and physical development of women professionals in Jeddah, KSA. Isolation is affecting the physical connections between people, and therefore hindering their interactions with others. When one is isolated, they will tend to focus on their thoughts and stress on past issues, wondering what the effect of their conditions will be (Arafa, et al., 2021). It is causing a significant portion of populations to report feelings of isolation due to a lack of connection with others. This effect causes mental health problems because of the depression and anxiety they could be experiencing. Therefore, a lot of anxiety and fear are developing, paving the 9way to ultimately develop mental health problems during this period (Kecojevic, 2020).

# 2 Methodologies

#### Research Design

This research study adopted descriptive survey research design, which is the most appropriate, to investigate the impact of COVID 19 on the mental health of professional women in the city of Jeddah, Saudi Arabia. This is in unison with examining the existence of any significant difference among the responses that can be referred to the study controlling variables, namely: age, marital status, occupation, profession, residence and level of education.

# Sample and Sampling Procedure

The sample of (322) respondents were selected by simple random sampling, from a population of around (250,000) women professional from Jeddah city (General Authority for statistics, 2020), with a 95% level of confidence and sampling error of 5%, according to Morgan & Kergcie formula.

Table 1 describes the characteristics of the professional women in Jeddah, KSA.

**Table 1:** Profile of Respondents

	Tuble 1. I forme of frespondent	<b>.</b>	
Variable	Category	Frequency	Percentage
	From 20-30 years	25	7.8

	From 31 - 40 years	107	33.2
Age	From 41 - 49 years	130	40.4
	Older than 50 years	60	18.6
	Total	322	100.0
Marital Status	Married	238	73.9
	Single	42	13.0
	Divorced	35	10.9
	Widow	7	2.2
	Total	322	100.0
	Teacher	150	46.1
	University Teacher	7	2.2
	School Leader	82	25.5
	Educational Supervisor	4	1.2
	Administrator	23	7.1
Profession	Physician/Nurse	5	1.6
	Private Sector Employee	28	8.7
	Self-Employed	15	4.7
	Other	8	2.5
	Total	322	100
	Inside the City	300	93.17
Residence	Outside the City	22	6.83
	Total	322	100
	Bachelor	211	65.5
	Master	84	26.1
Educational Level	Doctorate	20	6.2
	Post Doctorate	7	2.2
	Total	322	100

#### Primary Data

Table 1 shows that the 40.4% of the respondents are of age group between 41-49 years old, 73.9% are married, 25.5% are school leaders, and 65.5% have Bachelor degree.

## **Research Instrument**

The questionnaire is the research instrument used in this Study which was constructed based on the previous literature, related to mental health and its symptoms. The questionnaire utilized a 5-point Likert scale that ranges from (Strongly agree) =5 to (Strongly Disagree) =1. The questionnaire is made of three domains with a total of 37 items. The first is the Emotional and Health domain (15 items), the Function and Thinking Activity domain (9 items), and the Social Domain (13 items). To examine the validity of the questionnaire, it was implemented on a sample of 50 participants from outside the sample of the current study. Pearson factor was calculated to test the correlation between the items and their respective domain, on the one hand and test the correlation between the domains and the research questions on the other hand.

Table 2: Pearson Correlation Factor.

TT 141	Health and Emotional Domain  Function and Thinking Activity Domain  Social Domain								
Healti	n and Emotional Domain	Function and Thinking Activity Domain			l Domain				
Item	Correlation Factor	Item	Correlation Factor	Item	Correlation Factor				
1	.664**	16	.748**	25	.569**				
2	.564**	17	.823**	26	.707**				
3	.562**	18	.762**	27	.797**				
4	.668**	19	.740**	28	.524**				
5	.737**	20	.842**	29	.797**				
6	.519**	21	.876**	30	.524**				
7	.760**	22	.688**	31	.725**				
8	.813**	23	.625**	32	.625**				
9	.828**	24	.769**	33	.656**				
10	.775**			34	.728**				
11	.541**			35	.695**				
12	.795**			36	.691**				

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	13	.721**			37	.682**	
	14	.699**					
	15	.818**					

Primary Data

**Table 3:** Pearson Correlation Factor between the items and their respective domains

Domain	Health and	Function and Thinking	Social
	Emotional Domain	Activity Domain	Domain
Health and Emotional Domain	-	.741**	.697**
Function and Thinking Activity Domain		-	.773**
Social Domain			-
Questionnaire	.911**	.907**	.904**

Primary Data

Tables 2 and 3 indicate that the questionnaire has appropriate internal consistency since the correlation Pearson factor has values that are statistically significant at  $\alpha \le 0.01$ .

Table 4: Questionnaire Reliability Test (Domains' Reliability).

Domain	Number of items	Reliability
Health and Emotional Domain	15	0.912
Function and Thinking Activity Domain	9	0.911
Social Domain	13	0.905
Questionnaire	37	0.958

Primary Data

The questionnaire was also tested for reliability which indicated that it has high level of reliability of (0.958) as shown in Table 4, which means that the results can be generalized to the study population.

#### **Tools of Analysis**

Data was analysed by using the SPSS version (22) in reference to the research questions, whereby the Pearson correlation factor was used to measure the questionnaire validity, Cronbach's alpha to measure the questionnaire reliability, means and standard deviation to measure the effect of COVID 19 on the mental health of women professionals in Jeddah, Chi Square test was used to test the hypothesis, T-Test to examine whether there is a statistical significant difference between the means of responses about the effect of COVID 19 on mental health of women professionals in Jeddah that can be referred to the difference in residence, one way ANOVA to examine if there is statistical significant difference between the means of responses about the effect of COVID 19 on mental health of women professionals in Jeddah that can be referred to the difference in age, marital status, occupation and education level. Finally, post-hoc test Scheffe test was used to find out which pairs of responses' means are significant.

# 3 Empirical results and discussion

The results of this empirical Study revealed that COVID 19 had a moderate impact on the mental health of women professionals in the City of Jeddah, Saudi Arabia.

Table 5: Impact of COVID 19 on the Mental Health of the Women Professionals in the City of Jeddah.

Domain	Mean	SD	Effect	Order	Chi <sup>2</sup>	DF	P-	Sig.
			Size				Value	
Health and Emotional Domain	3.14	.85	Moderate	1	1344	54	0.00	Sig
Function and Thinking Activity Domain	2.85	.93	Moderate	2	1281	35	0.00	Sig
Social Domain	2.83	.84	Moderate	3	1899	50	0.00	Sig
Questionnaire	2.96	.78	Moderate	-	1418	102	0.006	Sig

Primary Data

Table 5 shows that the degree of the effect of COVID 19 on the mental health of the women professionals in the city of Jeddah, is moderate, whereby the mean of their responses of all domains is 2.96, with a standard deviation of 0.78, which is neutral.

The impact of COVID 19 on the Health and Emotional Domain has a mean of 3.14, followed by the Function and Thinking Domain with a mean of 2.85, and the Social Domain with a mean of 2.85, the social field, with a mean of 2.83.



The Chi-Square was used to test the hypothesis that states: "there is no impact of COVID 19 on the mental health of professional women in the City of Jeddah, Saudi Arabia". Results revealed that the p-value that corresponds to the Chi-Square values for every domain in the questionnaire is less than (0.05); which necessitates the rejection of the null hypothesis, thus affirming that there is a statistically significant impact of COVID 19 on the mental health of the women professionals in the City of Jeddah, Saudi Arabia.

One-way ANOVA and T-Test were used to find the differences at the level of significance (0.05) between the average responses of the respondents on the impact of the Corona pandemic on the mental health of working women in the Jeddah according to the age, marital status, profession, and place of residence variables.

First: Differences according to Age

Results as shown in Table 6, revealed that there are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the mean of the responses about the impact of the Corona pandemic on the mental health of working women in the city of Jeddah, due to the difference in age, whereby the p value of the degree of freedom in every domain is less than the level of significance ( $\alpha \le 0.05$ ).

More specifically, it turned out that the differences were in workers whose ages ranged from 30 to 40 years as shown in Table 7, where the mean of the responses of the whole questionnaire was (3.13), which is the largest average response between different groups according to age, and the results showed that they are most affected by the level of mental health in general. Statistically, that's a significant difference compared to female workers over the age of 50 years and over in particular.

The results of the one-way analysis of variance (ANOVA) test reveals that there are statistically significant differences between the mean of the study sample responses on the impact of the Corona pandemic on the mental health of working women in the city of Jeddah due to the difference in age. Whereby the significant probability values associated with the calculated F value in each domain is less than ( $\alpha \le 0.05$ ).

**Table 6:** One-Way ANOVA measuring the Significant differences between the Mean Scores of the Sample on the impact of COVID-19 on mental health of women professionals that can be referred to the difference in age.

Domain	Source of	Sum of	Degree of	Mean of	F value	P
	Variance	Squares (SS)	Freedom (df)	Squares (MS)	(Calculated)	Value
Health and	Between groups	4.273	3	1.424		.120
Emotional	Within Groups	231.530	318	.728	1.956	Not
	Total	235.803	321			Sig.
Function	Between groups	13.775	3	4.592		001
Activities and	Within Groups	264.071	318	.830	5.529	.001
Thinking	Total	277.846	321			Sig.
	Between groups	7.165	3	2.388		010
Social	Within Groups	224.509	318	.706	3.383	.019
Domain	Total	231.673	321			Sig.
Whole	Between groups	6.176	3	2.059		010
Questionnaire	Within Groups	193.361	318	.608	3.386	.018
	Total	199.538	321			Sig.

Primary Data

**Table 7:** The results of the Scheffe test for dimensional comparisons in the sample responses on the impact of the Corona pandemic on the mental health of working women in the city of Jeddah due to the difference in age as shown in the table below.

Age	Age	From 20-	From 31-	From 41-	More than
		30 Years	40 Years	50 Years	50 years
	Mean	2.95	3.13	2.94	2.74
	Difference Mean		0.18	0.01	0.21
Married	Significance		0.78	0.99	0.71
	Difference Mean			0.19	0.39*
Single	Significance			0.31	0.021
	Difference Mean				0.20
Divorced	Significance				0.43

Primary Data

<sup>\*</sup>Significant at ( $\alpha \le 0.05$ )

Second: Differences according to Marital Status

Results of the one-way ANOVA test as revealed in Table 8 show that there are statistically significant differences at the level of significance ( $\alpha$  <0.05) between the mean of responses about the impact of the Corona pandemic on the mental health of working women in the city of Jeddah, due to the difference in marital status. Whereby the significant probability values associated with the calculated F-value in each domain is less than the level of significance ( $\alpha$  <0.05).

Table 8: One-Way ANOVA to test Significant differences between Mean Scores of responses due to the difference in Marital Status.

Domain	Source of	Sum of	Degree of	Mean of	F value	P
	Variance	Squares (SS)	Freedom (df)	Squares (MS)	(Calculated)	Value
Health and	Between	11.603	3	3.868		
Emotional	groups	11.005	3	3.000	5.486	.001
	Within Groups	224.200	318	.705	3.400	.001
	Total	235.803	321			
Function	Between	12.500	3	4.167		
Activities and	groups	12.300	3	4.107	4.004	002
Thinking	Within Groups	265.345	318	.834	4.994	.002
	Total	277.846	321			
	Between	8.397	3	2.799		
Social	groups	8.397	3	2.199	2.006	.008
Domain	Within Groups	223.276	318	.702	3.986	.008
	Total	231.673	321			
Whole	Between	10.220	3	3.407		
Questionnaire	groups	10.220	3	3. <del>4</del> 0/	5 700	.001
	Within Groups	193.361	318	.608	5.722	.001
	Total	199.538	321			

Primary Data

To find out the direction of the differences, a Scheffe test was used for the dimensional comparisons as shown in Table 9

**Table 9:** The results of the Scheffe test for dimensional comparisons in the sample responses on the impact of the Corona pandemic on the mental health of working women in the city of Jeddah due to the difference in marital status.

Marital	Marital Status	Married	Single	Divorced	Widow
Status	Mean	2.88	3.02	3.45	3.09
	Difference				
Married	Mean		0.14	0.57*	0.21
	Significance		0.74	0.01	0.91
	Difference				
Single	Mean			0.43	0.07
	Significance			0.12	0.99
	Difference				
Divorced	Mean				0.36
	Significance				0.73

Primary Data

\*Significant at ( $\alpha \le 0.05$ )

Table 9 shows that the differences were in the divorced professional women status, where the mean of their responses to the questionnaire as a whole was (3.45), which is the largest mean response between different groups according to marital status, and the results showed that they are most affected by the level of mental health in general, and in a statistically significant way compared to married professional women in particular.

Third: Differences in regard to the Profession

Results of the one-way ANOVA test in Table 10 revealed that there are no statistically significant differences at the significance level ( $\alpha \le 0.05$ ), between the mean of responses on the impact of the Corona pandemic on the mental health of professional women in the city of Jeddah, due to the difference in the occupation or profession. Whereby the significant probability values associated with the calculated F-value in each domain is greater than the level of significance ( $\alpha \le 0.05$ ).



Table 10: One-Way ANOVA to test Significant differences between Mean Scores of responses due to the difference in

Occupation/Profession.

Domain	Source of	Sum of	Degree of	Mean of	F value	P
	Variance	Squares (SS)	Freedom (df)	Squares (MS)	(Calculated)	Value
Health and	Between groups	9.390	8	1.174		
Emotional	Within Groups	226.413	313	.723	1.623	.117
	Total	235.803	321			
Function	Between groups	7.461	8	.933		
Activities and	Within Groups	270.385	313	.864	1.080	.377
Thinking	Total	277.846	321			
	Between groups	8.480	8	1.060		
Social	Within Groups	223.194	313	.713	1.486	.161
Domain	Total	231.673	321			
Whole	Between groups	7.754	8	.969		
Questionnaire	Within Groups	191.784	313	.613	1.582	.129
	Total	199.538	321			

Primary Data

Fourth: Differences in regard to the residence

Results of the T-test in Table 11 show that there are statistically significant differences at the level of significance (a ≤ 0.05), between the means responses about the impact of the Corona pandemic on the mental health of professional women in the city of Jeddah due to the difference in the place of residence, as the significant probability values associated with the value (T) in each domain is below the level of significance (a  $\leq$  0.05). Comparing the average responses of female professionals in the city of Jeddah, it became clear that the differences were in the direction of workers outside the cities, as they are more affected by the Corona pandemic at the level of mental health, compared to workers inside the city.

Table 11: The results of the T - TEST to reveal the significance of the differences between the means of the study sample responses on the impact of the Corona pandemic on the mental health of professional women in the city of Jeddah due to the place of residence.

Domain	Levels of Variables	Mean	St. Dev.	T-Test	df	P-Value
Health and	Inside City	3.11	.85	2.753	320	.006
Emotional	Outside City	3.63	.77	2.733	320	.000
Function Activities	Inside City	2.81	.91	3.403	320	.001
and Thinking	Outside City	3.50	.86	3.403		.001
Social Domain	Inside City	2.78	.83	3.886 320		000
	Outside City	3.50	.80	3.000	320	.000
Whole Questionnaire	Inside City	2.92	.77	2 671	320	000
	Outside City	3.55	.75	3.671	320	.000

Primary Data

Fifth: Differences in regard to Academic Qualifications

Results of the one-way ANOVA test in Table 12 show that there are no statistically significant differences at the level of significance ( $\alpha$ < 0.05) between the means of responses on the impact of the Corona pandemic on the mental health of professional women in the city of Jeddah, due to the difference in the academic qualification. Whereby the significant probability values associated with the calculated F-value in each domain is greater than the level of significance (a ≤ 0.05).

Table 12: The results of the one-way analysis of variance (ANOVA) test to reveal the significance of the differences between the means of the study sample responses on the impact of the Corona pandemic on the mental health of

professional women in the city of Jeddah, due to the difference in academic qualification.

Domain	Source of	Sum of	Degree of	Mean of	F value	P
	Variance	Squares (SS)	Freedom (df)	Squares (MS)	(Calculated)	Value
Health and	Between groups	1.294	3	.431		
Emotional	Within Groups	234.509	318	.737	.585	.625
	Total	235.803	321			
Function	Between groups	2.647	3	.882	1.020	204
Activities and	Within Groups	275.198	318	.865	1.020	.384

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f	. Sci. Lett. <b>12</b> , No.	11, 2869-2878 (2023)	/ http://www	v.naturalspublishing	.com/Journals.asp	₽ N	28	77
	Thinking	Total	277.846	321				
		Between groups	1.445	3	.482			
	Social	Within Groups	230.228	318	.724	.665	.574	
-	Domain	Total	231.673	321				
	Whole	Between groups	1.084	3	.361			
	Questionnaire	Within Groups	198.453	318	.624	.579	.629	
		Total	199.538	321				

Primary Data

### 4 Conclusion

The main aim of this research was to study the impact of COVID 19 on the mental health of working professionals in Jeddah, Kingdom of Saudi Arabia. Since women are not only the job doers in offices but also the home makers, their contribution cannot be ignored. Data were collected by providing questionnaires to 322 women professionals. The Questionnaire consisted of three domains with 37 variables measuring the mental health of women professionals. The three domains were: "Emotional and Health Domain, "Functional and Thinking Activity Domain" and "Social Domain". The statistical techniques used to analyse and interpret the data were The Statistical Tools, namely being the Pearson Correlation factor, Mean, Standard Deviation, Chi Square Test and ANOVA. The Pearson correlation factor was used to measure the questionnaire validity, Cronbach's alpha to measure the questionnaire reliability, means and standard deviation to measure the effect of COVID 19 on mental health of women professionals in Jeddah, T-Test to examine if there is statistical significant difference between the means of responses about the effect of COVID 19 on mental health of women professionals in Jeddah, which can be referred to the difference in residence, one way ANOVA to examine if there is statistical significant difference between the means of responses about the effect of COVID 19 on mental health of women professionals in Jeddah that can be referred to the difference in age, marital status, occupation and education level. Finally, post-hoc test Scheffe test was used to find out which pairs of responses' means are significant.

Mean and Standard Deviations, reveal that the impact of COVID 19 on the mental health of women professionals in the city of Jeddah, is moderate. The Study with the help of Chi square test affirm that there is a statistically significant impact of COVID 19 on the mental health of the women professionals in the City of Jeddah, Saudi Arabia. The strategies which will mitigate the impact of COVID 19 on the mental health of the women professionals are to avoid exposure to media and be in touch with family and friends by using social media (CDC, 2020). Getting enough sleep and ensuring physical fitness will go a long way in overcoming the mental anxiety (Kecmanovic, 2020). Employers have to ensure that the employees are not overburdened. It is evident from previous studies that 'work from home' options have increased the workload of the employees, and this has triggered the mental health issues (Kecmanovic, 2020). Finally, an empty mind is the devil's workshop. Keep yourself engaged in activities that release your mental stress.

#### Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

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