

## Assessing the Effects of COVID-19 on Workplace Mental Stress in Pakistan

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### Abstract

All over the globe, including in Pakistan, COVID-19 has had a negative impact on people. Out of everything, the pandemic affects health, finances, social life and also creates a lot of mental anxiety. Feeling stressed in the mind means you are emotionally and physically tensed which can occur when someone gets bothered, frustrated, upset or nervous due to a certain event or idea. The aim of our study is to check and measure how the COVID-19 pandemic has affected the mental stress of employees in private organizations at Karachi. The concept of the study is “The Transactional Model of Stress and Coping Theory”. The theory points out that people rely on appraisal to figure out harm, danger or challenges which sets off their actions to deal with those situations. For this study, we obtained information from the employees of 05 x Major pharmaceutical organizations (GSK, GETZ, ABBOTT, SEARLE, & SAMI Pharma) in Karachi by giving them a survey form that was posted online. I picked 21 statements or questions related to COVID-19 to see how the pandemic has influenced the employees’ mental stress. The formation of the scales was planned so that future groups can easily use them when studying pandemics. The results pointed out that 75.57% of workers in private organizations aged 18 to 50+ years in Karachi, Pakistan are under greater stress because of the COVID-19 situation. The pressure continues since we have not put a stop to the pandemic. The results of this research could contribute to additional research/evaluation on COVID-19 and its effects on mental stress and finding appropriate ways to help people in Pakistan deal with mental stress.

**Keywords:** COVID-19, Pandemic, Mental Stress and Anxiety

### Introduction and Background

Novel Corona virus (COVID-19) was surfaced at WUHAN city China in December 2019 and spread to all over the world which was become a global pandemic later on. The pandemic badly affected the entire world and considerable number of people more than 68 million and caused death toll to 1.55 Million (till 08 Dec 20). The Medical research managed to produce the vaccine against the virus, the trials were a success and now vaccination is underway. The vaccine’s ability to work is still unclear. Many countries have implemented several steps like wearing masks, putting parts of the population on lockdown, making everyone distance themselves socially, self-isolating if necessary and having smart lockdowns to curb the spread of the corona virus. In addition to the difficulties caused by the disease, these measures also increased people’s mental stress. All these consequences of COVID-19 increase mental stress levels particularly for employees. It was found from past studies that such global pandemics can raise human stress and impact their abilities at work. People who felt the largest impact of mental stress were the employees, individuals sick with COVID-19 and next the general public, their families and friends.

During ongoing COVID-19 pandemic, it is very important to realize how the population, especially those in severely affected countries such as China, USA, Brazil, India, Russia and UK have been managing the disease such a major disaster. Additionally, the world have experienced some known risk factors of mental stress such as depression, anxiety including high mortality rate, food insecurity, discrimination, experience with infected and sick individuals, which can lead to some adverse mental health outcomes during the pandemic. It is pertinent to mention that till date, there are limited researches/ studies have been conducted in this regard to investigate the impact of COVID-19 pandemic on mental stress of employees of private organizations. Stress is when you feel mentally and physically tensed and it often arises from something making you feel angry, annoyed or anxious. In the view of the American Psychological Association, the main stress types are acute stress, episodic acute stress and chronic stress. In moments of high-stress, some people may notice signs of stress such as anxiety, sadness, headaches and back pain that last only for a short while. In such cases, individuals have many crises and are usually tense most of the time. The health problems are often close and if not controlled appropriately, they can become more serious. In contrast, chronic stress means lowering stress levels and causes health problems as time goes by. The cause is usually deep issues that life brings such as poverty, violence or racism and we have little control over them. A form of stress that occurs because of how events in one's external or internal environment are perceived, resulting in the psychological experience of distress and anxiety is called The Transactional Model of Stress (Lazarus & Folkman, 1984).

### **Research Problem**

Everyone has been influenced by COVID-19 differently when it comes to work. Since we value our workforce the most, it is important to keep them motivated by talking to them often, preparing plans, offering guidance and consistently acting this way. HR managers and organizations have a duty to support their workers to relieve stress, problems with money or social issues so they can do their jobs well. In the earlier research, the impact of COVID-19 on the mental stress of employees in private organizations at Karachi Pakistan was not included. This research will find out the impact of covid-19 on employees' mental stress at private organizations and advise on how they can handle this situation.

### **Research Objectives**

- To assess how much mental stress in COVID-19 had on the employees of private companies in Karachi, Pakistan.
- To make certain that the employees of any organization are without mental stress.
- Offer tips on dealing with stress and suggest standard procedures to limit the transmission of the pandemic.
- This research will assist further studies to explore how COVID-19 has affected the mental stress of employees in private organizations of Pakistan.

### **Research Question**

What is the impact of nCOVID-19 pandemic on mental stress of employees of private organization at Karachi?

What precautionary measures are being taken by the employees to keep safe from the virus?

### **Scope of Study**

On the basis of previous researches on pandemic crises like this, it was established that situations like this had increased human stress levels and affected human performance.

The impact was mostly experienced by the employees, mainly of private organizations, sufferers of COVID-19, then general public, their families and friends. In simple terms, stress refers to a feeling of tensed emotions or tight feelings in the body. Feeling stressed can result from any sudden event or idea that makes a person feel frustrated, angry or nervous. Most nations have enacted measures such as mask wearing, lockdowns, staying apart and self-isolation to help stop the spread of COVID-19. These all measures caused mental stress in addition to the stress felt by the disease itself. These all measures and effects of COVID-19 have a bad impact on mental stress especially on employees. What measures we should take to reduce the stress and increase employee's performance.

### **Literature Review**

During the pandemic of COVID-19, most of the people at US and Canada were observed with more stress or anxiety related issues which comprise of fear to get infected, fear of coming into contact with contaminated surfaces or items, fear of contact with other national visiting USA and Canada who might be carrying virus with them, the social and economical consequences of ongoing pandemic, and traumatic stress symptoms about the disease e.g., sleeplessness, nightmares and intrusive thoughts (Steven Taylor, 2020). According to the researchers' findings, HR managers of the companies should recognize their lead in digitalizing the workforce and create policies that reflect more resilience, flexibility and adaptability. Because of changes in company beliefs, a number of companies have high turnover rates during the pandemic. Still, a few companies have started addressing the needs of their workers. Because of firings, salary reductions and granting employees unpaid leaves, workers' attitudes toward their organization have changed during COVID-19. It is now important for HR management to manage costs while still strengthening the staff. If this is not achieved, the employees' effectiveness and efficiency will not be reached (Iza Gigauri, 2020). Governments and employers in China should realize how much post-COVID-19 stress disorder (PTSD), stress, anxiety, depression and insomnia can affect the employees. Wanqiu Tan (2020) discussed that in China, people who frequently washed their hands, wore face masks and saw their company worry about their health seemed to deal with less psychiatric problems at work (Wanqiu Tan, 2020). There is more stress, anxiety, depression and insomnia among health care workers (HCW) in China, just as in other parts of the world because of the pandemic. Things particular to COVID-19 such as unclear ways of transmitting it, quick spread, no clear guidelines for treatment and no vaccine, result in various mental health problems. COVID-19, in comparison to SARS, is causing widespread chaos because of how strongly connected the world is and how much attention COVID-19 receives from the media (Tang et al., 2018; Ho et al., 2020, Mamidipalli Sai Spoorthy 2020).

The first effects of COVID-19 pandemic on mental health and living standards among Liaoning local residents in the mainland China were mildly stressful. Because the COVID-19 pandemic is still happening, the findings must be checked and investigated more on bigger populations later (Yingfei Zhang, 2020). Various factors (including where people live and their earlier mental health) led to most people in Turkey enduring unpleasant and potentially severe problems at the beginning of the COVID-19 crisis. Slowly, these first responses to containment started to change into issues involving society, spiritual beliefs and the economy due to continuously increasing measures and a lack of mental health help. Owing to the late attention given to mental health projects, they put forward this manuscript to the government with the aim to update existing mental health studies for the wider public (Ahmet Tanhan, 2020). Many children in Bangladesh had mental health challenges because of the lockdown. If parents follow better strategies and improve domestic problems, parental education, care

for children and jobs, it will be good for their mental well-being (Sabina Yeasmin, 2020). Nearly one-fourth of the people included in the survey research in Saudi Arabia experienced moderate to severe emotional stress during the beginning of the COVID-19 pandemic. Public health safety steps against COVID-19 appear to have benefits for people's mental health (Abdulmajeed A. Alkhamees, 2020).

A lot of the studies being carried out now are about biomedical people's physical well-being. Hence, there is evidence that mental health problems have gone unnoticed by many. This study will help other researchers by looking at COVID-19's effect on employees' mental health, using social sciences, psychology and human resource management perspectives (Salima Hamouche, 2020). The world is going through a crisis that has not been seen for more than a century. Even so, we can do certain things, for example wash our hands, to lessen this problem. It is still unclear how the pandemic is affecting employees and organizations. The present study brings to light people's experiences in the early stages of the pandemic, with COVID anxiety being a main aspect (John P. Trougakos, 2020). As a result of the pandemic, there have been major changes in every region and this means organizations have to handle things differently and find new approaches to work with their employees. Sheppard (2020) points out that preparing for more changes and difficult times is necessary for companies. These organizations need to select and apply platform-based technologies as well as develop different business models (Sheppard, 2020). It is important for HRM to handle the stress that employees have due to the gap between their jobs and their families (Giurge & Bohns, 2020).

## **Methodology**

### **Research Design**

Since the study looks into the emotional responses of private employees during the COVID-19 pandemic in Karachi, it is considered an exploratory research. The quantitative method will be used to collect data that will help test the theory by measuring both the independent and dependent variables and processing them through statistical analysis.

### **Research Paradigm**

With the help of quantitative technique we have completed this study and draw the conclusion with mixed method (Pragmatism).

### **Research Approach**

My approach of this study is basically deductive type. With the help of available knowledge we wanted to expand the existing knowledge.

### **Research Method**

That is descriptive type of study.

### **Research Technique**

Quantitative techniques were used to complete this study.

### **Research Collection Method**

We collected responses for this study with the help of online questionnaire/ survey form.

### **Research Procedure**

We adopted Quantitative and questionnaire based procedure to analyze the impact of COVID-19 on mental stress of employees of private organization at Karachi.

## Population

Of the companies present in Karachi, we chose the top five with the biggest annual turnover from the pharmaceutical sector.

**Table Summary of Population**

Name	Annual Turnover(Rs)	No of Employees at Karachi
GSK	32,388 million	2,000
Getz	28,363 million	1300
ABBOTT	26,688 million	1,400 Pakistan
SEARLE	24,561 million	2098
SAMI Pharma	24,055 million	More than 500

## Sampling Strategy

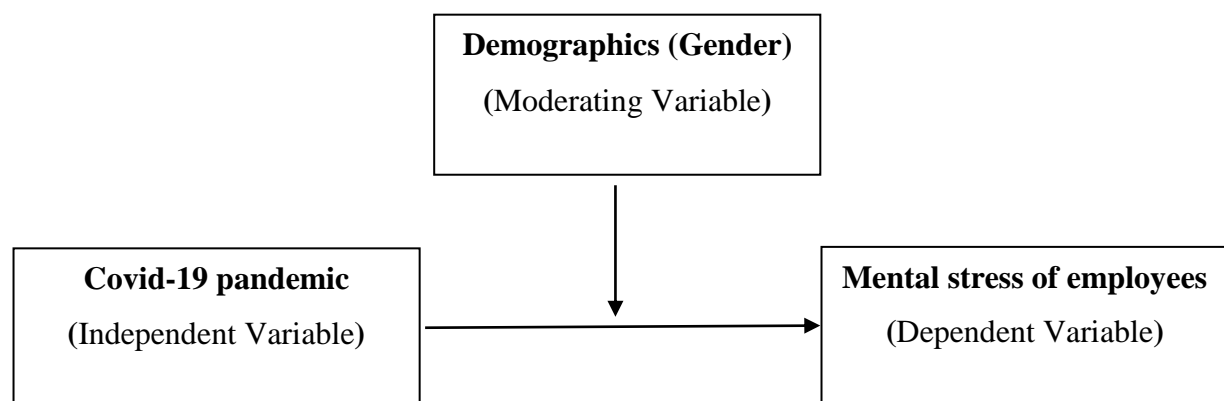
A single online system was set up and the questionnaire was sent to the top five manufacturers annually in Karachi.

## Theoretical Frame Work

Based on “The Transactional Model of Stress and Coping Theory,” I have done my research. The Transactional Model stresses how people assess harm and challenges to then start dealing with or managing stress. For these reasons, anything in the work environment can cause stress for the person doing the appraisal. Different things can affect the way each person judges their requirements and what they can do, for example, their personality, the demands of the specific situation, their ability to respond, what they have faced before, time that has passed and their existing stress. Still, as in all transactional theories about work-related stress, critics believe that the appraisal concept is oversimplified and does not always consider what a person has accomplished, wishes for or who they are (Harris, Daniels and Briner 2004). Furthermore, his later writings underlined that his stress theories did not pay attention to the results of coping in social networks and with people around us (Lazarus 2006).

## Conceptual Framework

The Logical Connection of Variables based on theory (Quantitative research)



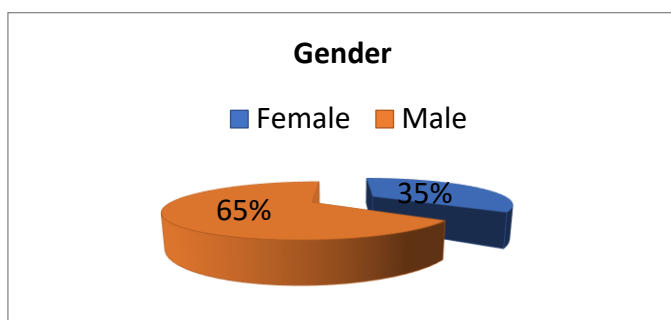
## Results

### Data Analysis

According to Lazarus & Folkman, (1984), stress is both a mental and physical kind of tension. An event or idea can be the source of frustration, anger or nervousness for us. Acute stress, episodic acute stress and chronic stress are the three kinds of stress described by the American Psychological Association. If someone experiences acute stress, they may feel anxious, sad, may suffer headaches and back pains for some time. In episodic acute stress, individuals go through several crises each time and are constantly in a tense state. The main symptoms are the same, yet they happen more regularly and build up when not controlled on time. Meanwhile, the chronic stress is long-lasting and might happen to us no matter what we do. Often, mental stress leads to responses in the body (Cacioppo, 1994). COVID-19 has touched everyone and created different challenges for each employee. If people are our greatest asset in business, we have to support them by talking to them, making plans, being consistent and offering assistance. Both HR managers and organizations must support employees so they can solve their mental, financial and other issues and do well for the company. Here, I have obtained information through a questionnaire survey sent online to private organization workers in Karachi. The details were gathered using an online Survey Form from employees working in the largest pharmaceutical companies in Karachi (GSK, GETZ, ABBOTT, SEARLE & SAMI Pharma). Between July 2020 and December 2020, we collected the feedback. The decision to use an online survey form was made because of ongoing COVID-19 and the government's rules calling for social distancing. Employees of the pharmaceutical industry at Karachi received the online Survey Form through my course participants who are also working there. I did not receive any money for finishing the survey. Moreover, people chose whether or not to complete the questionnaire. In addition to questions about COVID-19 distress, the survey included measures about the participants' age, gender, current levels of anxiety and depression and different personality qualities. The process of collecting data was initiated in July 2020 finished in December 2020.

In order to finish the research with 95 observations, information was gathered from a sample chosen by probability and random sampling. The process begins by reviewing demographics, then the reliability of the responses is reviewed and the results are dependable across the whole scale. After checking how the variables are related or not using correlation analysis, regression analysis is performed to understand the effect of independent variables on dependent variables.

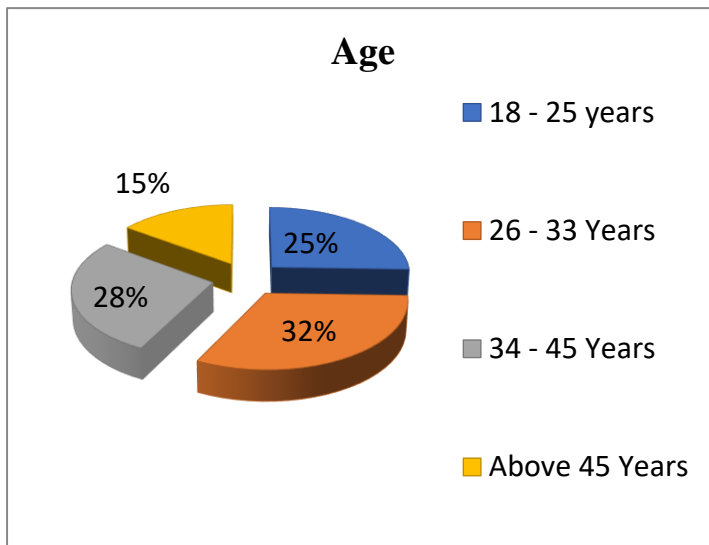
**Table 4.2 Summary of the Respondents' Gender**



Gender	
Female	33 (34.7 %)
Male	62 (65.30%)

According to our results 65.3% respondent are male and remaining 34.7 % respondents are female who participate in this study.

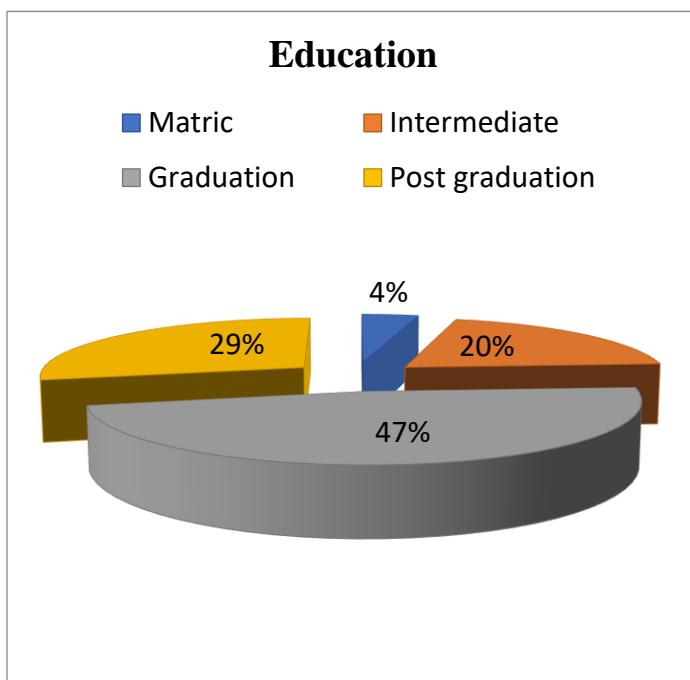
**Table 4.3 Summary of the Respondents' Age group**



Age	
18 to 25 Years	24 (25.5 %)
26 to 33 Years	30 (31.9 %)
34 to 45 Years	27 (27.7 %)
Above 45 Years	14 (14.9 %)

According to respondent results 25.5 % respondent are youth having age between 18 to 25 years, age between 26 to 33 years are 31.9 %, 27.7 % are of age 34 to 45 years and remaining 14.9 % respondents are above 45 years of age.

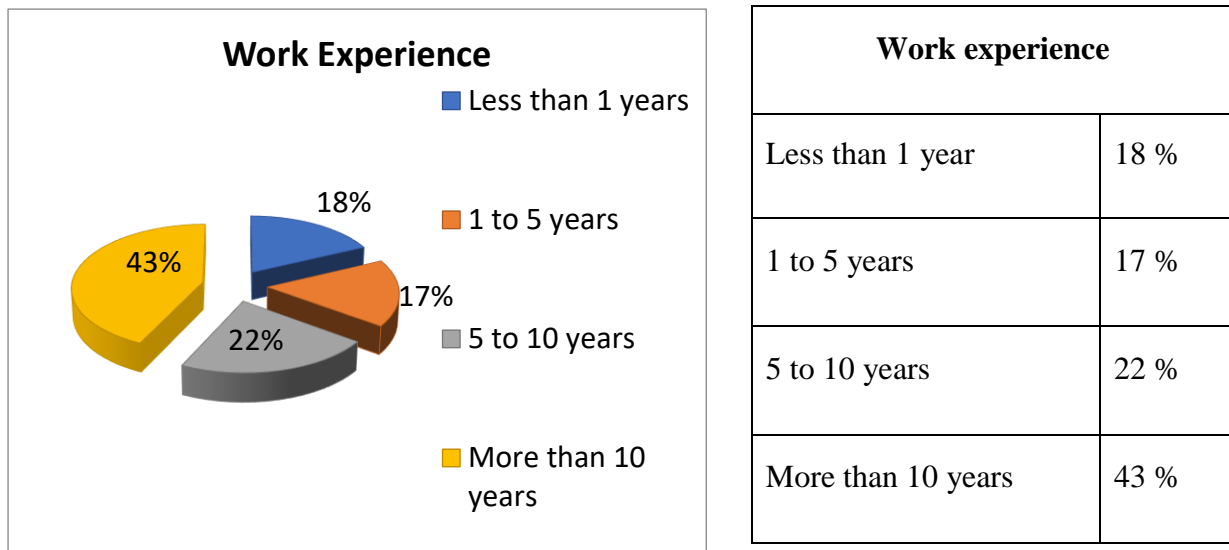
**Table 4.4 Summary of the Respondents' Education Wise**



Education	
Matric	4 %
Intermediate	20 %
Graduation	47.5 %
Post-graduation	28.5 %

According to respondent results, 4% respondent are Matric, 20 % are Intermediate, 47.5 % are Graduate and remaining 28.5 % respondents are post graduates who participate in this research work.

**Table 4.5 Summary of the Respondents' Work Experience in Pharmaceutical Industry**



According to respondent results, 18% respondent have work experience less than 1 year , 17 % are from 1 to 5 years, 22 % are 5 to 10 years and remaining 43 % respondents have more than 10 years of work experience who participate in this research work.

#### Results

Case Processing Summary			
		N	%
Cases	Valid	95	100
	Excluded	0	0
	Total	95	100.0

a. List wise deletion based on all variables in the procedure.

#### Reliability test

Reliability Statistics	
Cronbach's Alpha	N of Items
.870	21

A Cronbach's Alpha test is used to check how reliable a sample is. The best result you can get from Cronbach's Alpha test is >80% and the competency point is >50%. The computed value for Cronbach's Alpha based on the above result is 87%. So, it shows that the sample size is sufficient for statistical analysis to be conducted.

#### KMO test for sample adequacy test

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.777
Bartlett's Test of Sphericity	Approx. Chi-Square	896.998
	Df	210
	Sig.	.000



KMO test checks how suitable the samples are for analysis. An ideal value is more than 80% and the standard one should be about >50%. According to the outcome above, KMO value is 0.777 or 78 %. This shows, the data or questionnaire can be used for further statistical analysis without any doubt.

### Cross Tabulation

It shows how various variables are linked. The tables below describe how age, gender, education and work experience relate to the main question of mental stress at work after the pandemic.

**Table The degree of feeling extra stress at work because of pandemic was related to age**

Cross tabulation								
Q16. Feel increased mental stress at work place after outbreak of pandemic								
	SA	SA	A	N	D	SD	Total	
Q1. Age	18-25	Count	7	8	6	2	1	24
		% within Q1	29.2%	33.3%	25.0%	8.3%	4.2%	100.0%
	26-33	Count	9	14	3	4	1	31
		% within Q1	29.0%	45.2%	9.7%	12.9%	3.2%	100.0%
	34-45	Count	7	16	1	2	0	26
		% within Q1	26.9%	61.5%	3.8%	7.7%	0.0%	100.0%
	above 45	Count	5	7	1	1	0	14
		% within Q1	35.7%	50.0%	7.1%	7.1%	0.0%	100.0%
Total	Count	28	45	11	9	2	95	
	% within Q1	29.5%	47.4%	11.6%	9.5%	2.1%	100.0%	

From the above table result we can deduce following:

a. Of the participants in this age group, 62.5% answered that they felt more mentally stressed at their workplace due to COVID-19 (SA=29.2%+A=33.3.0%), 25% remained neutral and only 12.5% reported feeling less mentally stressed (D=8.3%+SD=4.20%).

b. Individuals aged 26 to 33 years, 74.5% had agreed, 9.7% were neutral and only 15.3% had disagreed that they experienced greater mental stress at work after COVID-19 (29.0% SA + 45.2% nodes A+ 12.9%D + 3.2%SD).

Those aged 33-45 years said they were more stressed at work following COVID-19 and 88.4% of them agreed with this (SA=26.9% + A=61.5%), while only 7.1% disagreed (D+SD=7.1%).

d. Among those who are age 45 or over, 76.9% had feelings of increased mental stress at work, 11.6% were neutral and only 11.6% had no such feelings.

**That is to say, 75.6 % of all age groups have experienced more mental stress because of COVID-19.**

**Relationship between Gender and Feel increased mental stress at work place after outbreak of pandemic**

Cross Tabulation								
Q16. Feel increased mental stress at work place after outbreak of pandemic								
			SA	A	N	D	SD	Total
Q2. Gender	Male	Count	11	12	5	4	1	33
		% within Q2	33.3%	36.4%	15.2%	12.1%	3.0%	100.0%
	Female	Count	17	33	6	5	1	62
		% within Q2	27.4%	53.2%	9.7%	8.1%	1.6%	100.0%
Total		Count	28	45	11	9	2	95
		% within Q2	29.5%	47.4%	11.6%	9.5%	2.1%	100.0%

From the above table result we can deduce following:

- Male - 69.7% were agreed (SA=33.3%+A=36.4%), 15.2% were remained neutral and only 15.1% were disagreed (D=12.1%+SD=3.0%) for feeling increased mental stress at work place after outbreak of COVID-19.
- Female - 81.6% were agreed (SA=27.4% + A=53.2%), 9.7% were remained neutral and only 9.7% were disagreed (D=8.1%+SD=1.6%) for feeling increased mental stress at work place after outbreak of COVID-19.

**Relationship between Education and Feel increased mental stress at work place after outbreak of pandemic.**

Cross Tabulation									
Q16.Feel increased mental stress at work place after outbreak of pandemic									
				SA	A	N	D	SD	Total
Q3. Education	Matric or below	Count		0	3	0	1	0	4
		% within Q3		0.0	75.0%	0.0%	25.0%	0.0%	100.0
				%					%
	Intermediate	Count		7	5	5	2	0	19
		% within Q3		36.8	26.3%	26.3%	10.5%	0.0%	100.0
				%					%
	Graduate	Count		15	20	5	4	1	45
		% within Q3		33.3	44.4%	11.1%	8.9%	2.2%	100.0
				%					%
	Post graduate	Count		6	17	1	2	1	27
		% within Q3		22.2	63.0%	3.7%	7.4%	3.7%	100.0
				%					%
Total	Count		28	45	11	9	2	95	
	% within Q3		29.5	47.4%	11.6%	9.5%	2.1%	100.0	
			%					%	

From the above table result we can see following:

- Matric or below - 75.0% were agreed (SA=0.0%+A=75.0%), 0.0% were remained neutral and only 25.0% were disagreed (D=25.0%+SD=0.0%) for feeling increased mental stress at work place after outbreak of COVID-19.

b. Intermediate – 63.1% were agreed (SA=36.8% + A=26.3%), 26.3% were remained neutral and only 10.5% were disagreed (D=10.5%+SD=0.0%) for feeling increased mental stress at work place after outbreak of COVID-19.

c. Graduate - 77.7% were agreed (SA=33.3% + A=44.4%), 11.1% were remained neutral and only 11.1% were disagreed (D=8.9%+SD=2.2%) for feeling increased mental stress at work place after outbreak of COVID-19.

d. Post Graduate – 85.2% were agreed (SA=22.2% + A=63.0%), 3.7% were remained neutral and only 11.1% were disagreed (D=7.4%+SD=3.7%) for feeling increased mental stress at work place after outbreak of COVID-19.

### **Relationship between Work experience and Feel increased mental stress at work place after outbreak of pandemic**

<b>Cross Tabulation</b>								
Feel increased mental stress at work place after outbreak of pandemic.								
			<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Total</b>
<b>Q4. Work Experience</b>	Less than one year	Count	4	5	5	2	1	17
		% within Q4	23.5%	29.4%	29.4%	11.8%	5.9%	100.0%
	1-5 y	Count	6	5	2	4	0	17
		% within Q4	35.3%	29.4%	11.8%	23.5%	0.0%	100.0%
	5-10	Count	6	11	2	1	1	21
		% within Q4	28.6%	52.4%	9.5%	4.8%	4.8%	100.0%
	More than 10 y	Count	12	24	2	2	0	40
		% within Q4	30.0%	60.0%	5.0%	5.0%	0.0%	100.0%
	Total	Count	28	45	11	9	2	95
		% within Q4	29.5%	47.4%	11.6%	9.5%	2.1%	100.0%

From the above table result we can see following:

a. Less than 1 year - 52.9% were agreed (SA=23.5%+A=29.4%), 29.4% were remained neutral and only 17.7% were disagreed (D=11.8%+SD=5.9%) for feeling increased mental stress at work place after outbreak of COVID-19.

b. 1-5 years– 64.7% were agreed (SA=35.3% + A=29.4%), 11.8% were remained neutral and only 23.5% were disagreed (D=23.5%+SD=0.0%) for feeling increased mental stress at work place after outbreak of COVID-19.

c. 5-10 years – 81.0% were agreed (SA=28.6% + A=52.4% ), 9.5% were remained neutral and only 9.6% were disagreed (D=4.8%+SD=4.8%) for feeling increased mental stress at work place after outbreak of COVID-19.

d. More than 10 years – 90% were agreed (SA=30.0% + A=60.0%), 5.0% were remained neutral and only 5.0% were disagreed (D=5.0%+SD=0.0%) for feeling increased mental stress at work place after outbreak of COVID-19.

### **Conclusion**

According to the findings, all employees at work have been affected by COVID-19. It has been found that the pandemic caused greater mental stress at work for employees aged 33-45 years (88.4%), female (81.6%), Post Graduate (85.2%) and who have work experience for more than 10 years (90%). In addition, nCOVID-19 has touched all of us, altered our daily

lives by bringing increased stress at work, at home, while shopping, living distant from others, losing jobs, facing tough financial times and grieving for any deceased relative or friend. Given that every organization relies on its HR most of all, we should always pay special attention to them. Our constant efforts in communicating, planning, supporting and being consistent will help our employees. Reducing the mental, economic and social issues of employees is the duty of HR managers and organizations so that employees can function better for the organization. All of us must be knowledgeable about COVID-19, what its symptoms are, how it spreads and the steps we can take to stay safe. It is necessary to know the effects of this pandemic on mental stress which first appears as anxiety, anger, panic attacks and depression. This will allow us to notice if someone we know or we are suffering from these symptoms.

### **Recommendation**

It is important for all of us to oblige with the SOPs provided by the Government of Pakistan and WHO so that we can be safe and slow the spread of the virus.

Because the pandemic has influenced us all, we should assist one another to handle its repercussions.

It may be useful to carry out a thorough research on the effects of COVID-19 on mental stress for employees and the general public in Pakistan and then find appropriate ways to tackle anxiety based on this research.

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