

Mental Health and Academic Performance of Students during Covid-19 in Pakistan

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ABSTRACT

COVID-19 has largely negative impact on the economy, wellbeing and education of the country. In the same way, Pakistan has been prominently affected by the COVID-19. The purpose of this study was to examine the impact of COVID-19 on the mental health and academic performance of the students. The quantitative research design with the help of online cross sectional survey questionnaire the data from 592 students was collected. The study found that 200 students were suffering from mild anxiety, 140 from moderate anxiety and 72 from severe anxiety. The study further found that COVID has affected most of the students in Pakistan. The lockdown has effected the concentration on education of loads of students. The study showed that the online learning had negative impacts on most of the student's learning.

Keywords: Academic performance, Anxiety, COVID-19, Lockdown, Mental health.

1. Introduction

Coronavirus Disease 2019 (COVID-19) was identified during December 2019 as untraceable pneumonia in Wuhan, Hubei Province, China (Zhai & Du, 2020). Thereafter, the international committee on taxonomy of viruses (ICTV) recognizes that the specialist causing COVID-19 is the new coronavirus, an extremely intense respiratory disease, coronavirus-2 (SARS-CoV-2) (Wathelet et al., 2020). Chen and Yuan, (2020) the coronavirus episode is rapidly spreading not only in China but around the world, the World Health Organization (WHO) announced a pandemic on March 12, 2020. The absolute number of confirmed 71.6 million cases and 1.6 million deaths in 216 countries as of November 2020 in the whole world, out of which 46.8 million patients are recovered (Bolotov et al., 2020; Hasan & Bao, 2020; Mheidly et al., 2020). A number of legislative measures have been adopted to neutralize the risk of the spread of diseases. These measures include travel restrictions, social distancing, quarantines compulsory for the travelers, banning the public gatherings, the closure of all the educational institutions, self-isolations, closure of the businesses, imposition of the lockdowns, curfews and making people to stay at their homes. The stakeholders in several countries around the world have announced isolation, lockdowns or curfew as a measure to stop the rapid spread of the infectious disease. These measures in general negatively affected the health, education, tourism and several businesses (Aqeel et al., 2020; Bhuiyan et al., 2020; Fawaz & Samaha, 2020; Mheidly et al., 2020; Saraswathi et al., 2020).

The coronavirus pandemic has affected all levels of schooling. Educational institutions around the world (in 192 countries) either closed by accident or made limited layoffs, affecting about 1.7 billion students worldwide (Singh & Adhikari, 2020). Numerous colleges around the world have either postponed or stopped physical education in order to limit social life and henceforth reduce the transmission of virus. However, these measures lead to more

accessible clinical and social consequences for both undergraduate and graduate students. In connection with the suspension of the work of classrooms in many schools and colleges, the transition to online education for students and graduate students is becoming more and more urgent. This type of education provides an additional method of limiting contact between the students themselves or between the teachers and students. However, many students do not have access to online education due to the lack of methods or tools because of the digital divide.

On 26th February, 2020, the first case of COVID-19 was identified in Pakistan. In Pakistan, the main COVID-19 instance was discovered on February 26, 2020 (Dhahri et al., 2020). Circumstances arose quickly, and on March 23, 2020, government imposed complete lockdown in the country in order to successfully contain COVID-19. Then, this complete lockdown was transformed into the smart lockdown by the government on 9th May, 2020. But, all the businesses, public places and educational institutions were kept closed during this time period. The mental health of the students particularly at the university level was highly affected because of the constant spread of COVID-19 infection, the blame games, conspiracy theories, myths, isolation, boredom and frustration and family financial losses. Several reports (Ahmed et al., 2020; Aqeel et al., 2020; Dhahri et al., 2020; Mian & Chachar, 2020; Noor et al., 2020; Singh & Adhikari, 2020) were published that highlighted the mental consequences of the epidemic for the entire population, students and health workers. But, there was no study conducted on the impact of COVID-19 on the mental health and academic performance of the students in Pakistan. In this way, this study will be a significant contribution in the empirical evidences.

2. Methodology

2.1 The Study Design and Sample

This study has adopted the quantitative research design. In this way, the data was collected through online google form, which was shared with the individuals on social media and WhatsApp. Initially, 628 individuals returned completed questionnaire, but 36 questionnaires were excluded because these individuals were not current students. So, 592 individuals were included for the final analysis of the study. The written consent form was also attached with the questionnaire and the respondents were free to participate in the research process.

2.2 Questionnaire Design

The survey questionnaire is adopted and it is based on two sections. The first section is based on generalized anxiety scale (GAD-7) (Spitzer et al., 2006), which has 7 items to measure the anxiety of the students. The responses were coded as “not at all (0), several days (1), over half the days (2) and nearly every day (3)”. Then the scores were added and then cut-off scores are considered as “mild (5-9), moderate (10-14) and severe (≥ 15) for anxiety”. The second section of the study was adopted from (Mahdy, 2020), which is based on 11 questions to measure the impact of COVID-19 on the academic performance of the respondents.

2.3 Data Analysis

After collection of the data through survey, the data was put into SPSS version 22. After that, the descriptive Statistics Analysis is used to analyse the impact of the COVID-19 on the mental health and academic performance of the students in Pakistan.

3. Results and Discussion

3.1 Demographic Data

In this study, there were total 592 individuals whose responses were included for the final analysis. There were 216 (36.5%) male students and 376 (63.5%) female students. The table 1 and figure 1 show the education level of the students who participated in the study.

Table 1: Educational Level

		Frequency	Percent	Cumulative Percent
Valid	Intermediate	64	10.8	10.8
	Undergraduate	388	65.5	76.4
	Masters	108	18.2	94.6
	MS/M.Phil	24	4.1	98.6
	PhD	8	1.4	100.0
	Total	592	100.0	

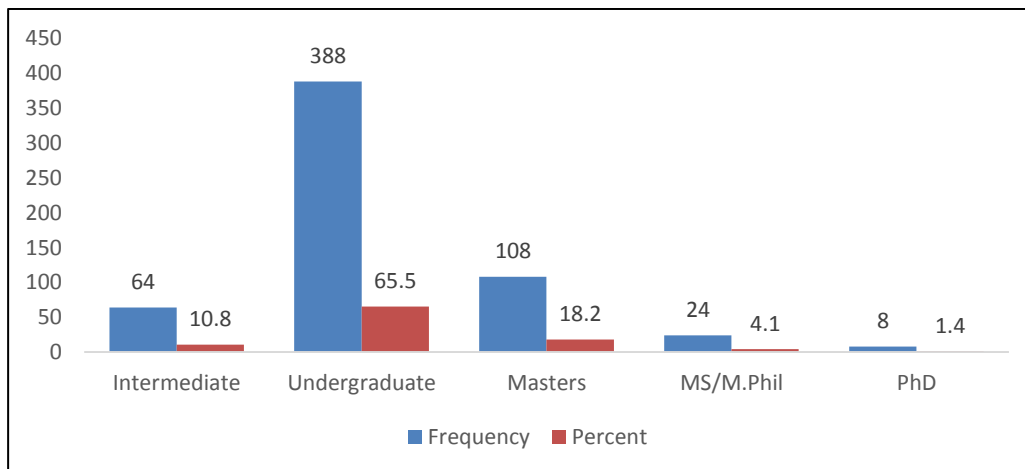


Fig.1. Educational Level

Table 2: Electronic Device Use to Study Online in Lockdown

		Frequency	Percent	Cumulative Percent
Valid	Laptop	244	41.2	41.2
	PC	32	5.4	46.6
	Smart phone	316	53.4	100.0
	Total	592	100.0	

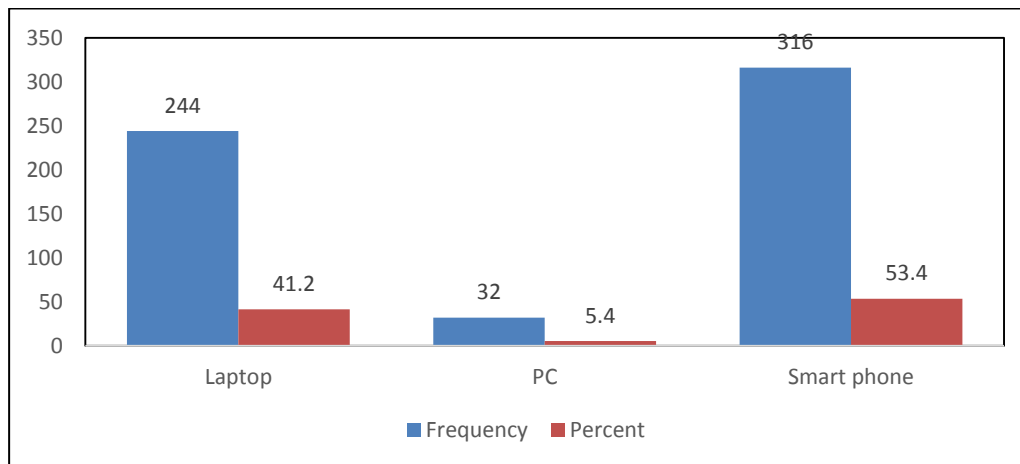


Fig.2. Electronic Device Use to Study Online in Lockdown

There were 64 (10.8%) students with Intermediate level, 388 (65.5%) with undergraduate level, 104 (18.2%) with masters' level, 24 (4.1%) with MS/M.Phil Level and only 8 (1.4%) with PhD Level. Table 2 and figure 2 shows the usage of electronic device by the students to study online. The study has found that 244 (41.2%) use Laptop to study online, 32 (5.4%) Use their PCs (Desktops) and 316 (53.4%) use their smartphones to study online. According to this data, it is clearly evident that most of the students use their smartphones for their study purpose.

3.2 Anxiety

After conducting the demographic analysis, the study analysed the anxiety level among the participants. In this way, the responses of the students were given numeric values and their responses were summarized. After that the scores were calculated to identify the anxiety level. The scores less than 5, were considered as free from anxiety, 5-9 scores were considered to be mild, 10-14 as moderate and equal to or more than 15 were considered as severe. So, the study found that 180 students (76 males, 104 females) did not suffer from anxiety, 200 students (64 males, 136 females) were having mild anxiety, 140 students (60 males, 80 females) were having moderate anxiety and 72 students (16 males, 56 females) were having severe anxiety (table 3 and figure 3).

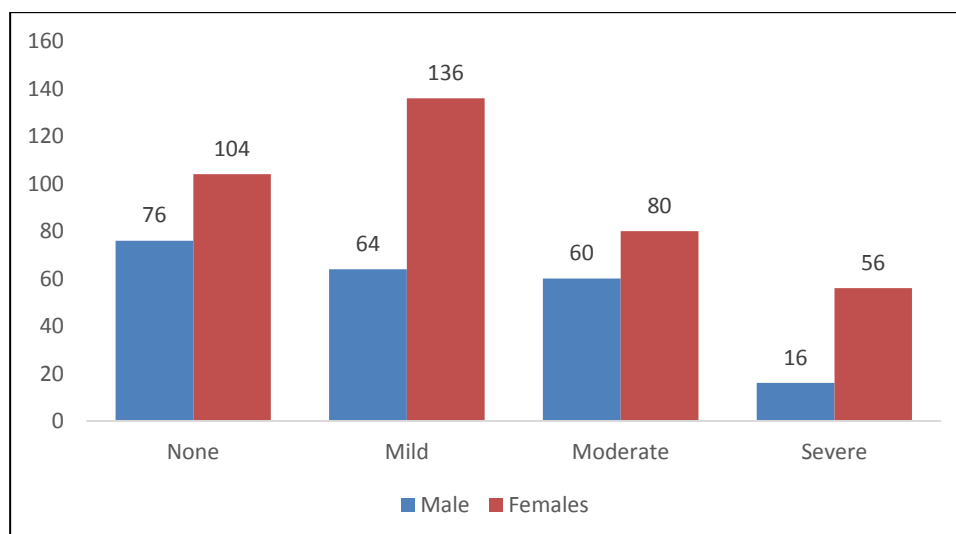


Fig.3. Gender and Total Anxiety

Table 3: Gender and Total Anxiety

		Total Anxiety Score				Total
		None	Mild	Moderate	Severe	
Gender	Male	76	64	60	16	216
	Females	104	136	80	56	376
Total		180	200	140	72	592

3.3 COVID Impact on Academic Performance

Table 4 and figure 4 show the responses of the students showing how COVID has affected their study. The responses of 32 students (34 males, 8 females) showed that it has not affected their study. 40 students (16 males, 24 females) responded that it has slightly affected their study. 132 students (68 males, 64 females) showed that it has moderately affected their study. 100 students (24 males, 76 females) expressed that it has considerably affected, 288 students (84 males, 204 females) showed that it has highly affected. The COVID has affected the study of females, it can be because of increasing home chores as they had to stay at home and not allowing other domestic staff at their homes for home chores.

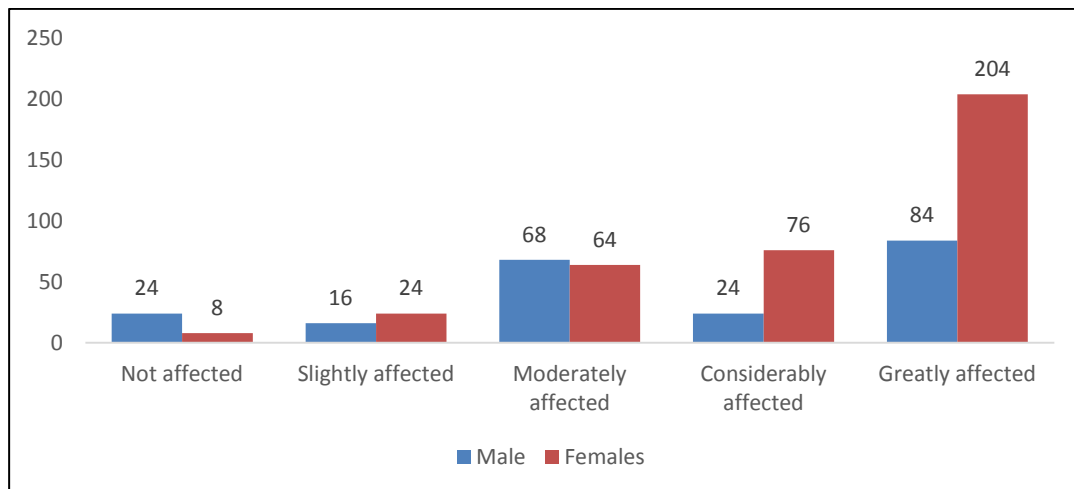


Fig.4. Impact of COVID on Study

Table 4: Impact of COVID on Study

		Not affected	Slightly affected	Moderately affected	Considerably affected	Greatly affected	
Gender	Male	24	16	68	24	84	216
	Females	8	24	64	76	204	376
Total		32	40	132	100	288	592

Table 5 and figure 5 show the impact of COVID on Research or project works and the study found that 120 students (32 males, 88 females) showed that it has been highly affected, 172 students (72 males, 100 females) showed that it has considerably affected, 156 students (76 males, 80 females) responded it has moderately affected, 76 students (20 males, 56 females) showed it has slightly affected and 68 students (16 males, 52 females) showed it has not affected their research or project work. This table shows that higher number of female students is affected by the COVID.

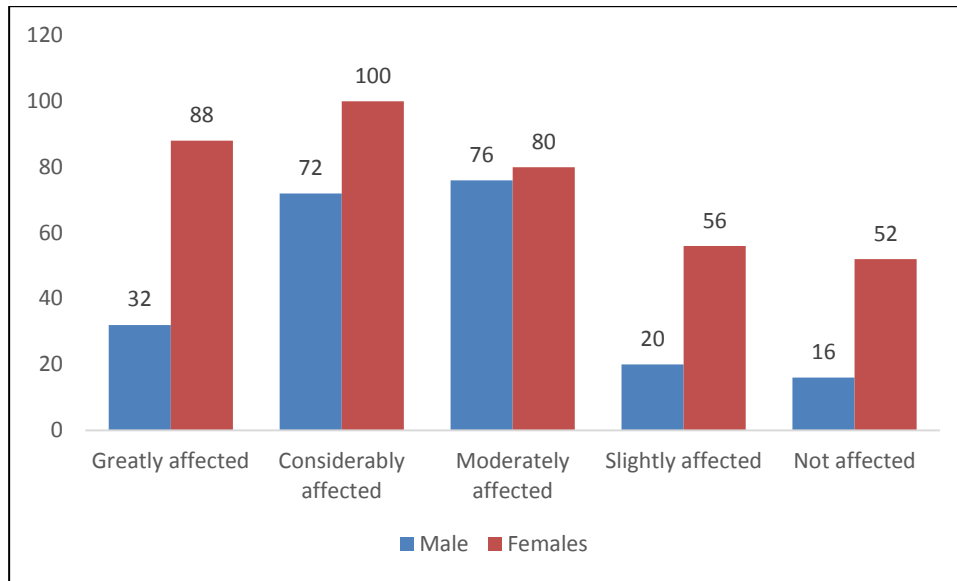


Fig.5. Lockdown Impact on Research/Project Work

Table 5: Lockdown Impact on Research/Project Work

		Greatly affected	Considerably affected	Moderately affected	Slightly affected	Not affected	
Gender	Male	32	72	76	20	16	216
	Females	88	100	80	56	52	376
Total		120	172	156	76	68	592

Table 6 and figure 6 show the concentration of the students on their education during lockdown. The study found that 216 students (60 males, 156 females) were highly affected, 136 students (64 males, 72 females) were affected, 104 students (36 males, 68 females) responded that it was moderate, 104 students (52 males, 52 females) responded that it was positively affected and 32 students (4 males, 28 females) responded that their concentration was highly increased during lockdown. Table 7 and figure 7 show the responses of the students about the impact of online education on their learning. The higher number of students 248 (60 males, 188 females) responded that online learning has highly affected their learning, 132 students (56 males, 76 females) responded that it has negative impact on their learning, 132 students (56 males, 76 females) responded that it has neutral impact on their

learning, 48 students (28 males, 20 females) responded that it has positive impact and 32 students (16 males, 16 females) responded that it has highly positive impact on their learning process.

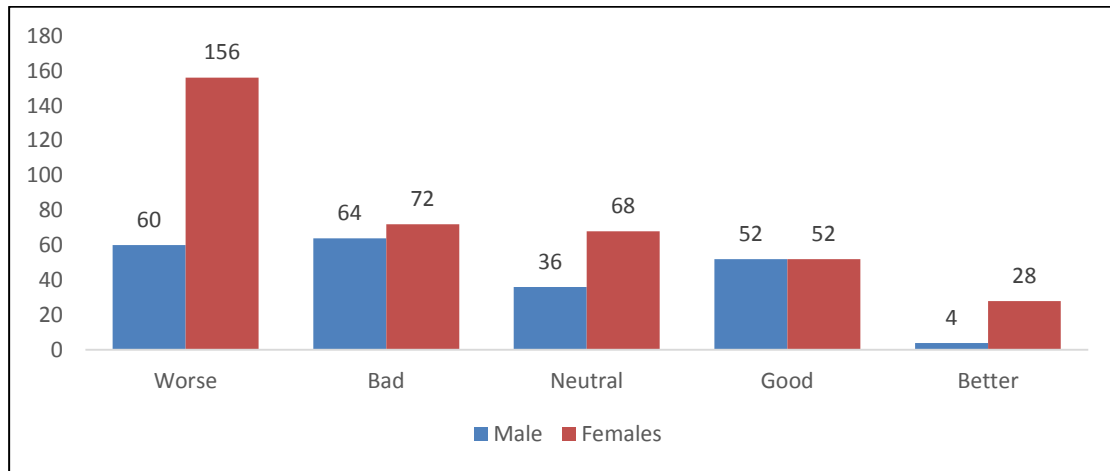


Fig. 6. Concentration on Education during Lockdown

Table 6: Concentration on Education During Lockdown

		Worse	Bad	Neutral	Good	Better	
Gender	Male	60	64	36	52	4	216
	Females	156	72	68	52	28	376
Total		216	136	104	104	32	592

Table 7: Impact of Online Education on Learning

		Worse	Bad	Neutral	Good	Better	
Gender	Male	60	56	56	28	16	216
	Females	188	76	76	20	16	376
Total		248	132	132	48	32	592

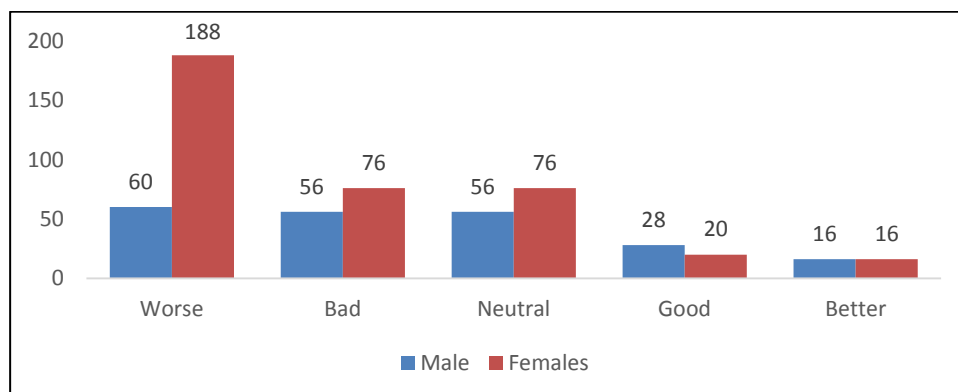


Fig.7. Impact of Online Education on Learning

4. Discussion

This study has found that 69.59 percent of the students are suffering from anxiety (mild, moderate, severe). In the same way, the previous studies (Dhahri et al., 2020; Mahdy, 2020; Mian & Chachar, 2020; Noor et al., 2020; Saraswathi et al., n.d.; Zhu et al., 2020) have also found the same results that the pandemic has positively significant impacts on the mental wellbeing of the individuals particularly the students. In this way, this is the first study to the best of the researcher's knowledge to be conducted in Pakistan, in which the impact of COVID-19 on the mental wellbeing and academic performance of the students is being assessed. The findings of the study have suggested that online education during this pandemic has highly negative impact on the learning of the students. The reasons can be for the negative impact of online education on learning; technological and digital infrastructure in Pakistan (Aqeel et al., 2020; Bolatov et al., 2020; Swinson, 2006), the low level of technological knowledge among students and teachers (Ahmed et al., 2020; Chen & Yuan, 2020; Singh & Adhikari, 2020; Zhai & Du, 2020). Due to the imposition of lockdown, the research and project work of the students are also highly affected. The concentration on education during this lockdown was also highly affected. Particularly, the female students are highly affected by the lockdown, the reasons can be considered for this as they have to do the home chores, the presence of whole family in the house, may have increased domestic tasks for female students in their houses and they absence of the domestic workers due to the fear of Coronavirus and lockdown.

5. Conclusion

COVID-19 has severely affected the human wellbeing at the global level. At the same times, it has also affected the economy and education of the countries. In this way, this is the first study to be conducted in Pakistan that has estimated the impact of COVID-19 on the mental wellbeing and academic performance of the students. The study adopted quantitative research design by implication of online survey through google form. This study has found that 69.59 percent of the students are suffering from anxiety (mild, moderate, severe). In the same way, the previous studies have also found the same results that the pandemic has positively significant impacts on the mental wellbeing of the individuals particularly the students. In this way, this is the first study to the best of the researcher's knowledge to be conducted in Pakistan, in which the impact of COVID-19 on the mental wellbeing and academic performance of the students is being assessed. The findings of the study have suggested that online education during this pandemic has highly negative impact on the learning of the students. Due to the imposition of lockdown, the research and project work of the students are also highly affected. The concentration on education during this lockdown was also highly affected. The findings of the study have also shown that 69.59 percent of the students are suffering from anxiety.

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