

Prevalence of anxiety, depression and stress among postgraduate students during COVID-19 situation: a study on postgraduate students

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Abstract: People from all over the world are walking amidst a critical juncture of their life as COVID-19 pandemic has unfolded its umbrella over the people irrespective of class, caste, race, national boundary etc. of common people. Students of all spheres are in a great crisis which has given rise to extreme anxiety, depression and stress. The present study focuses on the prevalence of anxiety, depression and stress of postgraduate students during this critical situation. The researchers have used descriptive survey technique and have collected data from 135 postgraduate students from different departments of Sidho-Kanho-Birsha University, Purulia, West Bengal, India. Pearson product moment method is used to calculate the coefficient of correlation. The result has revealed that the relationship between anxiety and depression for the female students, stress and depression for the female students, anxiety and depression for the students of education department, anxiety and depression for the students of other department, anxiety and depression for the students of 2nd semester and anxiety and depression for the students of 4th semester are significant. Apart from all these no significant relationships are found among any other aspects.

Key Words: anxiety, depression, stress, postgraduate students, COVID-19 situation.

1. INTRODUCTION:

COVID-19, a dangerous threat to human civilization, has spread its arm almost throughout the whole world. In most of the countries people are going through a tough situation as lockdown, physical distancing, self-quarantining etc. is everywhere. As a result, people are suffering from mental illness, nervous breakdown and so many other psychic diseases. Anxiety, depression and stress have become very much prevalent in this present ticklish situation. People from all spheres and all over the world are handling the same situation of mental turmoil. The normal life of the people was disrupted and they are living a life of turbidity with increased anxiety, depression and stress. Anxiety is the extreme worry and fear towards some day to day life situation whereas depression is a kind of medical illness that directs our feelings and thinking negatively. Stress is “a particular relationship between the person and the environment that the person considers to be taxing or exceeding his or her resources and putting his or her well-being at risk” (Lazarus & Folkman, 1984). Because of this critical situation, the education sector has also been affected a lot. The teaching process has been shifted from offline to online mode. Thus, lots of students are deprived of normal course of learning because of digital divide. Thus, the students are marching towards unavoidable anxiety, depression and stress. They are going through a critical juncture in their life.

2. LITERATURE REVIEW:

Johansson et al. (2021) conducted a study on “Depression, anxiety and stress among Swedish university students before and during six months of the COVID-19 pandemic: A cohort study” to study the trajectories of depression, anxiety and stress during the COVID-19 situation. The study was conducted on 1836 Swedish university students. The result showed that symptoms of depression, anxiety and stress were much stable during the first 3 months but in summer months it decreased a little. Rodriguez-Hidalgo et al. (2020) made a study on “Fear of COVID-19, Stress, and Anxiety in University Undergraduate Students: A Predictive Model for Depression” to study the levels of fear of COVID-19, stress, anxiety and depression among the undergraduate students of Ecuador during the lockdown. The survey was performed on 640 undergraduate students between the age group 18 to 47 years old. The result showed that the relationships between anxiety, fear and stress resulted in the increase of depression. Sundarasan et al. (2020) conducted a study on “Psychological Impact of COVID-19 and Lockdown among University Students in Malaysia: Implications and Policy Recommendations” to examine the impact of COVID-19 on the level of anxiety among the university students in Malaysia. A cross-sectional online survey was conducted during lockdown. The study was performed on 983 respondents. The result revealed that the main stressors were financial constraints, remote online teaching and uncertainty about the future. Basheti et al. (2021) performed a study on “Prevalence of anxiety and depression during COVID-19 pandemic among healthcare students in Jordan and its effect on their learning

process: A national survey” to examine the level of anxiety and depression of healthcare students of Jordon and its effect in the learning process during COVID-19 situation. For this study the researchers used descriptive cross-sectional method via online survey. The result revealed that most of the students have normal anxiety and depression while some students have abnormality in their level of anxiety and depression. Keskin (2021) studied on “Self-Report Measurement of Depression, Anxiety, and Stress Caused by COVID-19 Pandemic in Senior Undergraduate Dental Students” to examine the effect of COVID-19 pandemic on the psychological health of senior undergraduate dental students in regard to anxiety, stress and depression. The study was conducted on 259 (103 males and 156 females) 5th year dental students between the age group 20-25 years. The result revealed that COVID-19 pandemic greatly affected the students as online learning platforms are not sufficient enough for clinical competence.

3. OBJECTIVES OF THE STUDY:

Objectives of this research work is to study the correlation between any two variables for male students, female students, students of education department, students of other departments, students of second semester and students of fourth semester during Covid-19 pandemic. Details are given below:

- To study the relationship between anxiety and stress for the male students.
- To study the relationship between anxiety and depression for the male students.
- To study the relationship between stress and depression for the male students.
- To study the relationship between anxiety and stress for the female students.
- To study the relationship between anxiety and depression for the female students.
- To study the relationship between stress and depression for the female students.
- To study the relationship between anxiety and stress for the students of education department.
- To study the relationship between anxiety and depression for the students of education department.
- To study the relationship between stress and depression for the students of education department.
- To study the relationship between anxiety and stress for the students of other department.
- To study the relationship between anxiety and depression for the students of other department.
- To study the relationship between stress and depression for the students of other department.
- To study the relationship between anxiety and stress for the students of 2nd semester.
- To study the relationship between anxiety and depression for the students of 2nd semester.
- To study the relationship between stress and depression for the students of 2nd semester.
- To study the relationship between anxiety and stress for the students of 4th semester.
- To study the relationship between anxiety and depression for the students of 4th semester.
- To study the relationship between stress and depression for the students of 4th semester.

3.1. HYPOTHESES OF THE STUDY:

In the purview of objectives 1-18 following hypotheses are framed.

- There is no significant relationship between anxiety and stress for the male students during COVID-19 situation.
- There is no significant relationship between anxiety and depression for the male students during COVID-19 situation.
- There is no significant relationship between stress and depression for the male students during COVID-19 situation.
- There is no significant relationship between anxiety and stress for the female students during COVID-19 situation.
- There is no significant relationship between anxiety and depression for the female students during COVID-19 situation.
- There is no significant relationship between stress and depression for the female students during COVID-19 situation.
- There is no significant relationship between anxiety and stress for the students of education department during COVID-19 situation.
- There is no significant relationship between anxiety and depression for the students of education department during COVID-19 situation.
- There is no significant relationship between stress and depression for the students of education department during COVID-19 situation.
- There is no significant relationship between anxiety and stress for the students of other department during COVID-19 situation.

- There is no significant relationship between anxiety and depression for the students of other department during COVID-19 situation.
- There is no significant relationship between stress and depression for the students of other department during COVID-19 situation.
- There is no significant relationship between anxiety and stress for the students of 2nd semester during COVID-19 situation.
- There is no significant relationship between anxiety and depression for the students of 2nd semester during COVID-19 situation.
- There is no significant relationship between stress and depression for the students of 2nd semester during COVID-19 situation.
- There is no significant relationship between anxiety and stress for the students of 4th semester during COVID-19 situation.
- There is no significant relationship between anxiety and depression for the students of 4th semester during COVID-19 situation.
- There is no significant relationship between stress and depression for the students of 4th semester during COVID-19 situation.

4. METHODOLOGY:

1. **Method:** For the present study, the researchers have used a descriptive survey type research.
2. **Population:** For the present study, the researchers considered all the students of Sidho-Kanho-Birsha University, Purulia, West Bengal, India, as the population.
3. **Sample & Sampling Technique:** Researchers have used random sampling technique. They have selected 135 postgraduate students from different departments of Sidho-Kanho-Birsha University as the sample for this present study.
4. **Scale Used:** Researchers have used Depression Anxiety & Stress Scales by Lovibond and Lovibond (1995) for the collection of data.
5. **Statistics Used:** For the present study, the researchers have Pearson product moment method to calculate the coefficient of correlation.

5. RESULT & DISCUSSION:

Correlation coefficient is used for the analysis of the data for this present study. Next it is discussed in different sub-headings according to the objectives of the study. The statistics shows a comprehensive picture of relationships in the level of depression, anxiety and stress in regard to gender, department and semester.

Table No. 1: Correlations of Level of Depression, Anxiety and Stress of Male Students
Correlations

		stress	anxiety	depression
stress	Pearson Correlation	1	.085	.079
	Sig. (2-tailed)		.499	.531
	N	66	66	66
anxiety	Pearson Correlation	.085	1	.225
	Sig. (2-tailed)	.499		.070
	N	66	66	66
depression	Pearson Correlation	.079	.225	1
	Sig. (2-tailed)	.531	.070	
	N	66	66	66

Table No. 2: Correlations of Level of Depression, Anxiety and Stress of Female Students
Correlations

		stress	anxiety	depression
stress	Pearson Correlation	1	.186	.251*
	Sig. (2-tailed)		.125	.038
	N	69	69	69
anxiety	Pearson Correlation	.186	1	.455**
	Sig. (2-tailed)	.125		.000
	N	69	69	69
depression	Pearson Correlation	.251*	.455**	1
	Sig. (2-tailed)	.038	.000	
	N	69	69	69

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table No. 3: Correlations of Level of Depression, Anxiety and Stress of Students of Education Department
Correlations

		stress	anxiety	depression
stress	Pearson Correlation	1	.138	.095
	Sig. (2-tailed)		.215	.397
	N	82	82	82
anxiety	Pearson Correlation	.138	1	.260*
	Sig. (2-tailed)	.215		.018
	N	82	82	82
depression	Pearson Correlation	.095	.260*	1
	Sig. (2-tailed)	.397	.018	
	N	82	82	82

*. Correlation is significant at the 0.05 level (2-tailed).

Table No. 4: Correlations of Level of Depression, Anxiety and Stress of Students of Other Departments
Correlations

		stress	anxiety	depression
stress	Pearson Correlation	1	.134	.250
	Sig. (2-tailed)		.339	.071
	N	53	53	53
anxiety	Pearson Correlation	.134	1	.455**
	Sig. (2-tailed)	.339		.001
	N	53	53	53
depression	Pearson Correlation	.250	.455**	1
	Sig. (2-tailed)	.071	.001	
	N	53	53	53

** . Correlation is significant at the 0.01 level (2-tailed).

Table No. 5: Correlations of Level of Depression, Anxiety and Stress of Students of Semester 2
Correlations

		stress	anxiety	depression
stress	Pearson Correlation	1	.016	.066
	Sig. (2-tailed)		.916	.670
	N	44	44	44
anxiety	Pearson Correlation	.016	1	.317*
	Sig. (2-tailed)	.916		.036
	N	44	44	44
depression	Pearson Correlation	.066	.317*	1
	Sig. (2-tailed)	.670	.036	
	N	44	44	44

*. Correlation is significant at the 0.05 level (2-tailed).

Table No. 6: Correlations of Level of Depression, Anxiety and Stress of Students of Semester 4
Correlations

		stress	anxiety	depression
stress	Pearson Correlation	1	.181	.198
	Sig. (2-tailed)		.085	.060
	N	91	91	91

anxiety	Pearson Correlation	.181	1	.356**
	Sig. (2-tailed)	.085		.001
	N	91	91	91
depression	Pearson Correlation	.198	.356**	1
	Sig. (2-tailed)	.060	.001	
	N	91	91	91

** . Correlation is significant at the 0.01 level (2-tailed).

5.1. HYPOTHESIS TESTING:

- Testing of H₀₁:** From table 1 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and stress for the male students during COVID-19 situation.
- Testing of H₀₂:** From table 1 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and depression for the male students during COVID-19 situation.
- Testing of H₀₃:** From table 1 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between stress and depression for the male students during COVID-19 situation.
- Testing of H₀₄:** From table 2 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and stress for the female students during COVID-19 situation.
- Testing of H₀₅:** From table 2 it is found that value of coefficient of correlation is significant at 0.01 level of significance. So, the null hypothesis is rejected. So, there is significant relationship between anxiety and depression for the female students during COVID-19 situation.
- Testing of H₀₆:** From table 2 it is found that value of coefficient of correlation is significant at 0.05 level of significance. So, the null hypothesis is rejected. So, there is significant relationship between stress and depression for the female students during COVID-19 situation.
- Testing of H₀₇:** From table 3 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and stress for the students of education department during COVID-19 situation.
- Testing of H₀₈:** From table 3 it is found that value of coefficient of correlation is significant at 0.05 level of significance. So, the null hypothesis is rejected. So, there is significant relationship between anxiety and depression for the students of education department during COVID-19 situation.
- Testing of H₀₉:** From table 3 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between stress and depression for the students of education department during COVID-19 situation.
- Testing of H₀₁₀:** From table 4 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and stress for the students of other department during COVID-19 situation.
- Testing of H₀₁₁:** From table 4 it is found that value of coefficient of correlation is significant at 0.01 level of significance. So, the null hypothesis is rejected. So, there is significant relationship between anxiety and depression for the students of other department during COVID-19 situation.
- Testing of H₀₁₂:** From table 4 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between stress and depression for the students of other department during COVID-19 situation.
- Testing of H₀₁₃:** From table 5 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and stress for the students of 2nd semester during COVID-19 situation.
- Testing of H₀₁₄:** From table 5 it is found that value of coefficient of correlation is significant at 0.05 level of significance. So, the null hypothesis is rejected. So, there is significant relationship between anxiety and depression for the students of 2nd semester during COVID-19 situation.

15. **Testing of H₀15:** From table 5 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between stress and depression for the students of 2nd semester during COVID-19 situation.
16. **Testing of H₀16:** From table 6 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between anxiety and stress for the students of 4th semester during COVID-19 situation.
17. **Testing of H₀17:** From table 6 it is found that value of coefficient of correlation is significant at 0.05 level of significance. So, the null hypothesis is rejected. So, there is significant relationship between anxiety and depression for the students of 4th semester during COVID-19 situation.
18. **Testing of H₀18:** From table 6 it is found that value of coefficient of correlation is very small and insignificant at 0.05 level of significance. So, the null hypothesis is retained. So, there is no significant relationship between stress and depression for the students of 4th semester during COVID-19 situation.

6. CONCLUSION:

Anxiety depression and stress are prevalent aspects in this present COVID-19 pandemic situation. People from all over the world are facing the same crisis. The present study has tried to find out the relationship of anxiety, depression and stress of the postgraduate students of Sidho-Kanho-Birsha University, Purulia. The study finds out that some aspects have significant relation between them whereas some haven't any. For all the cases except male students anxiety and depression are significantly correlated. This pandemic has pushed the students into anxiety, depression and stress but it is heartily desired that the pandemic will be over very soon and the the students will return to the mainstream of learning.

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