

# Anxiety, Depression and Stress Among College Students During COVID 19 lockdown

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**Abstract** - The present research studied gender differences for anxiety depression and stress among college students during COVID-19 lockdown. The sample consisted of 619 college students of Vasantrya Naik Government Institute of Arts and Social Sciences, Nagpur district of Maharashtra. Anxiety, depression, and stress scale (ADSS) was administered along with questions those inquiring the participants' basic information from all the 619 participants with the help of Google forms. Results indicated that 7% of the respondents were experiencing severe anxiety, 13% moderate anxiety, and 20% mild anxiety while 6% of the respondents were experiencing severe depression, 13% moderate depression, and 18% mild depression and at the same time 13% of the respondents were experiencing severe stress, 18% moderate stress, and 21% mild stress. The results further indicated significant gender differences in anxiety, depression and stress reported by the participants. The findings further suggested that female college students scored higher on anxiety, depression and stress as compared to their male counterparts. The findings of this research have implications for promoting our knowledge of gender related differences in anxiety, depression, and stress among college students during COVID-19 pandemic lockdown so that effective counselling and other interventions could be introduced for the students.

## INTRODUCTION

Covid-19, commonly known as the novel Coronavirus is believed to have originated from a wet market in Wuhan, China, and has spread all over the world, resulting in a large number of hospitalizations and deaths (Wang et al. 2020). The COVID-19 pandemic has had a significant impact on public mental health. A wide range of psychological outcomes have been observed during the virus outbreak, at various levels. At the individual level, people are more likely to experience fear of getting infected and eventually being stereotyped by others. Early detection of problems in individuals makes the intervention plans

more beneficial. Research has shown that frequent media exposure may lead to distress (Neria Y, Sullivan GM 2011). Studies conducted in China, (Shigemura J, Ursano RJ, Morganstein JC, Kurosawa M, Benedek DM.2020) the first country that was affected by coronavirus spread, show that people's fear of the unknown nature of the virus can lead to mental disorders.

University students may constitute a particularly vulnerable population for mental health problems in light of challenges commonly associated with transitions to adulthood and the frequent economic and material difficulties of this population [R.P. Auerbach, P. Mortier, *et al* 2018; J.N. Rubley (2017)]. Several reports during the lockdown suggest that mental illness is on the rise since the outbreak of this malignant virus. Experts from the Psychiatric Society of Goa reported anxiety, depression, stress, and other mental health issues were common during the lockdown (PTI, 2020). A recent survey conducted by the Indian Psychiatry Society indicates 20% rise in patients suffering from mental illness (Lolwal, 2020). Therefore, monitoring and oversight of the population mental health during crises such as a pandemic is an immediate priority. The aim of this study is to analyse the prevalence of anxiety depression and stress in male and female college going young adults.

## METHOD

Participants:

Seven hundred and twenty-nine students living in and around Nagpur City and studying in Vasantrya Naik Government Institute responded to the google form sent to them as part of the study. Out of 729 participants. After discarding incomplete, repeated forms and keeping in mind the age group of 18 to 29 (Mean age= 20.95 years, SD=2.60) the data which remained is 619 in size. Out of 619 participants 206 (33.27%) are male students and 413 (66.72%) are

females. Majority of the students are doing graduation course (69%) others are (21%) postgraduation and (10%) research students.

Measures:

The Anxiety, Depression and Stress Scale was developed by Pallavi Bhatnagar and her colleagues and published through National Psychological Corporation, Agra, India. It is the test that measures the anxiety, depression and stress of an individual. A scale of 63 were developed at first and 48 items out of 63 were retained in the item selection. The test comprises of a consumable book of ADSS questionnaire which has 48 items, (19 in Anxiety Subscale, 15 in Depression Subscale, and 14 in Stress Subscale)

Each item is scored 1 if endorsed “Yes” and 0 if endorsed “No”. Higher score indicates experiencing greater anxiety, depression, and stress and vice-versa. Reliability of the anxiety scale was done using Cronbach’s alpha with a score of .66, spearman brown coefficient score of .79 and having mean 6.89 and SD 4.06. Reliability of the depression scale was .68 and .81 using alpha and spearman method, having mean and SD, 5.95 and 4.26 respectively and finally reliability of the stress scale was .56 using cronbach’s alpha and .71 using spearman brown coefficient, having mean and SD as 6.70 and 3.36 respectively.

The table below shows classification of individuals.

Percentiles	Sub-Scale			Interpretation
	Anxiety	Depression	Stress	
Below P <sub>25</sub>	0-3	0-2	0-4	Normal
P <sub>25</sub> - P <sub>50</sub>	3-5	2-4	4-6	Mild
P <sub>50</sub> - P <sub>75</sub>	5-9	4-9	6-9	Moderate
P <sub>75</sub> - P <sub>100</sub>	Above 9	Above 9	Above 9	Severe

Procedure:

Initial Google meet was arranged for students in different departments of the institution. They were informed about the purpose of the study upon initial meeting. Participants were explained about the nature of the study. Participants were informed about the confidentiality regarding information collected from them. A time span for data collection was set up that was enough to collect sufficient data from the participants. The google form had the purpose of the study explained in detail. Necessary instructions and guidelines were provided in typed form for properly filling the scale. After which was the scale given,

which they were requested to fill-up as per the instructions given previously. Following the completion of the scale participants were thanked for their participation and cooperation.

RESULTS

Results of table 1, shows a greater number of male students (67%) fall in the category of normal anxiety level as compared to female students (60%). While looking at the classification more female students experience mild anxiety (female =20%; male=17%), moderate anxiety (female13%; male 11%) and severe anxiety (female=7%; male 5%). For Depression again larger number of male students fall in the category of normal (71%) as compared to female students (63%). Whereas the classification shows more female students falling in the category of mild (female=18%; male =14%), moderate (female=13%; male=11%), severe (female=6%; male=4%) depression. The third factor measured was stress for which again male students fared well with more male (53%) in normal range as compared to female (48). But more male students were found in the classification of mild (male=25%; female=21%) for moderate stress level the percentage scores were more or less similar (female=18%; male=17%), but for severe stress level female outnumbered the male students (female=13%; male 5%).

Table 1. Frequency count (f) and percentage (%) of scores in different classifications of anxiety, depression, and stress for male and female students.

Anxiety classifications	Male students (N=206)		Female students (N=413)	
	F	%	f	%
Normal	137	67	249	60
Mild	36	17	82	20
Moderate	23	11	53	13
Severe	10	5	29	7
Depression classifications	Male students (N=206)		Female students (N=413)	
	F	%	f	%
Normal	147	71	261	63
Mild	29	14	72	18
Moderate	22	11	55	13
Severe	8	4	25	6
Stress classifications	Male students (N=206)		Female students (N=413)	
	F	%	f	%
Normal	108	53	196	48

Mild	52	25	87	21
Moderate	35	17	75	18
Severe	11	5	55	13

Table 2. shows the mean difference between males and females. The mean value of anxiety for males were found to be 3.07, with 0 standard deviation. For females, the mean value for anxiety was found out to be 3.62 with 0.5 standard deviation. The mean values of females were found to be higher than males and high significant difference was observed. Males and females differ significantly on anxiety ( $t = 22.4$ ,  $p < 0.01$ ).

Table 2: Mean, SD and t-value showing the differential impact of male (N=206) and female college students (N=413) on anxiety.

Anxiety scores	Mean	SD	t-value
Male students	3.07	0	22.4**
Female students	3.62	0.5	

Table 3. indicates the mean difference between males and females. The mean value of depression for males was found to be 2.05 with 0 standard deviation. For females, the mean value for depression was found to be 2.55 with 1.5 standard deviation. The mean value of females was found to be higher than males. And high significant difference was observed. Males and females did differ significantly on depression ( $t = 6.78$ ,  $p < 0.01$ ).

Table 3: Mean, SD and t-value showing the differential impact of male (N=206) and female college students (N=413) on depression.

Depression scores	Mean	SD	t-value
Male students	2.05	0	6.78**
Female students	2.55	1.5	

\*\* $p < 0.01$

Table 4. displays the mean difference between males and females. The mean value of stress for males was found to be 3.73 with 1.41 standard deviation. For females, the mean value for stress was found to be 4.48 with 2 standard deviation. The mean value of females was found to be higher than males. And high significant difference was observed. Males and females did differ significantly on stress ( $t = 6.11$ ,  $p < 0.01$ ).

Table 4: Mean, SD and t-value showing the differential impact of male (N=206) and female college students (N=413) on stress.

Stress scores	Mean	SD	t-value
Male students	3.73	1.41	6.11**
Female students	4.48	2	

\*\* $p < 0.01$

## DISCUSSION

The findings of the current study corroborate on how students have suffered during the pandemic, which is in line with other studies (Cao et al. 2020). Essentially, female students reported significantly high anxiety, depression and stress levels as compared to male students. These finding could be attributed to the closure of universities and colleges that offer limited technological support and knowledge resulting in uncertainty about the future of students. The current pandemic places demand on students to adapt to online teaching knowing well that the resources are scarce, thus resulting in a greater number of female students having high anxiety, depression, and stress levels. These findings could be because students usually engage and interact with each other frequently and physically in a social setting. During lockdown, with the closure of universities and colleges, such physical and social interaction has been restricted resulting in stress. For learning, students have to utilise online platforms that they may not be used to or competent with. In addition, online learning may be disruptive due to technological issues and thereby, leading to worry about future careers.

COVID-19 not only causes physical health concerns but also results in a number of psychological disorders. The spread of the new coronavirus can impact the mental health of people in different communities. Thus, it is essential to preserve the mental health of individuals and to develop psychological interventions that can improve the mental health of vulnerable groups during the COVID-19 pandemic.

## LIMITATIONS

Although the research has made significant contributions and can be used by the government and other agencies to tackle the adverse psychological effects during Covid-19 and lockdown, it has some limitations. Firstly, the size of the sample for male student group was quite small as compared to female sample group. Secondly, the researchers utilized online Google forms for data collection that hindered the participation of a larger section of the population such as those who do not have internet, especially the underprivileged.

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