



# A study on Perceived Stress in College Students during Covid-19 Pandemic

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## **Abstract**

The whole World is affected due to COVID-19 pandemic and had a great impact on the lives and mental health of the people. The spread of the virus was very swift and caused global health threat affecting adults and children. The routines were disturbed drastically and many psychological changes were observed in the population due to pandemic like fear, stress, anxiety, insecurity or depression. One of the primary precautions to reduce the spread of the pandemic was social distancing which led to further isolation of people from one another leading to emotional imbalances and mental strain.

The closure of educational institutions was one of the key decisions taken by the Government to prevent the spread of the pandemic. Teaching methodology shifted from physical teaching to virtual mode teaching using technology. Many interactive tools were designed and developed by the institutions / organizations to bridge the gap and facilitate online teaching. These tools demanded smart devices, the support of technology, learning support services connectivity so on which deprived majority of the students in attending online classes and completing their courses. Research studies reveal that the new normal situation had a tremendous impact on student drop out ratio, as they lacked the essential tools and services due to the drastic and sudden change in the teaching pedagogy. Students who handled this situation and who continued studies showed poor performance as they lacked the ability to balance the stress and pressure. Therefore, the present study focused to understand and explore the perceived stress level in students during the Pandemic.

**Key words: Stress, Pandemic, Students, Online classes, Stress scale, Isolation.**

The Corona virus 2019 known as COVID-19 was declared as Global Pandemic by the World Health Organization and was defined as a social health emergency leading to worldwide restrictions to human life so as to regulate and control the spreading of the virus. These significant changes in the human lifestyle induced disruptions in the daily routine causing mental trauma and distress during pandemic. Factors identified resulting in the stress like inadequate information about pandemic, misinformation from media houses, spread of disease, fear of losing loved ones / members of family, isolation or quarantine, monetary issues, employment, future confusion and dilemma, etc really affected mental stability and physical health of the people. (Ferguson et al, 2020)

Stress is dynamic and it is influenced by factors like demographic, economic, social and environmental factors. Drastic rate of increasing stress levels in the population is an indication of unresolved problems and tensions prevailing in the material worlds which are accelerated due to the above factors. Previous research proves that large outbreaks of diseases do have impact on individual and family's mental health for eg Ebola, SARS, HINI Swine Flu etc which showed high stress levels amongst middle aged women. Further the degrees of stress levels were higher for the age groups 16 to 25 years. (Brooks et al, 2020)

Similarly, socio demographic factors like gender, educational levels, economic status and behavioral factors are also associated with stress amongst adult individuals aged between 25 years to 55 years (Robin, 2019). Covid 19 pandemic resulted in a state of Perceived stress. It can be defined as the feelings or thoughts that an individual has about how much stress they are under at a given point or over a period of time. (Lee.,2012), Perceived stress measures are used to examine the relationship between stress and other behavioral factors which influence them. The Covid protocols imposing restrictions on daily routine led to massive stress especially to student community where schools and colleges were closed indefinitely exposing them to uncertainty (Hussain,2020). The otherwise busy communities suddenly were isolated with fear, panic, depression, de motivation etc.(Wilder, 2019). There are many studies conducted worldwide to prove that students have stress about their studies. Therefore, the present study aimed to understand the stress levels and their mental condition in students during Covid-19.

### **Objective**

The basic objective of the study is to explore the Perceived Stress Levels among College Students during Corona Pandemic in Hyderabad.

### **Methodology**

The data for this study was collected during the lockdown period due to the teaching methodology changed from offline to online modes. The sample for the study was collected from the students pursuing Intermediate and graduation in twin cities of Hyderabad and Secunderabad, Telangana. The data was collected using Google forms by creating a link for the survey. The Perceived Stress Scale (PSS) developed by Sheldon Cohen (1988)

was the tool used for the collection of the data as this tool is most widely used in research to understand the perceived stress experiences of the respondents. The scale consisting of 10 questions measures the perception of stress which is generally the feelings and thoughts faced by the respondents in the previous month. The questionnaire is designed in two parts Part A consists of the demographic profile of the respondents like gender, age, levels of education and Part B consists of the perceived stress scale. The data was captured using 5-point Likert Scale ranging from never (0) to very often (4) Scores for the 4 positively stated questions (4,5,7 and 8) are reversed items. The interpretation was based on the mean scores of 0 - 13 considered as low stress, 14 - 26 observed as moderate stress and 27 - 40 observed as high stress. (Cohen, 1988)

A total of 312 responses were received from the respondents and statistical analysis was performed using mean values and Chi square to compare perceived stress scale with variables age and gender. If p- value is less than 0.05 it is considered statistically significant. The results are depicted as follows

**Table No 1. Gender Distribution**

Gender	Responses
Male	164 (52.56)
Female	148 (47.43)
Total	312 (100)

Source: Survey

Figures in brackets represent percentage

The analysis reveals that 52.56 percent and 47.43 percent of the respondents were male and female. The study has been administered by considering both the genders to be important for understanding stress levels amongst students.

**Table No 2. Age Distribution**

Age	Male	Female	Total
15 – 18 Years	76 (46)	59 (39.8)	135 (43.2)
19 – 22 Years	88 (53.6)	89 (60)	177 (56.7)
Total	164 (100)	148 (100)	312 (100)

Source: Survey

Figures in brackets represent percentage

The above analysis reveals that a total of 135 respondents are in the age group of 15 to 18 years, of which 46 percent and 40 percent are male and female respectively. Similarly in the age group of 19 to 22 years, out of 177 respondents 53.6 and 60 percent are male and female respectively.

**Table No 3 Educational Background**

Education	Gender		Total
	Male	Female	
Intermediate	61 (37.8)	48 (32.4)	109 (34.9)
Under Graduates	103 (62.8)	100 (67.5)	203 (65)
Total	164 (52.5)	148 (47.4)	312 (100)

Source: Survey

Figures in brackets represent percentage

The above table depicts the educational background of the sample respondents, a total of 109 respondents are pursuing Intermediate of which 37.8 percent are male and 32.4 percent are female. Respondents pursuing under graduation are 203 of which male are 62.8 percent and female are 67.5 percent.

An attempt has been made to study stress levels of the respondents by the perceived Stress Scale and the following are the results. For the convenience's sake abbreviations are used in the stress table where N – Never, A.N - Almost Never, S – Sometimes, F.O - Fairly Often, V.O - Very Often.

**Table No 4. Perceived Stress Scale**

S.no	Particulars	N	A.N	S	F.O	V.O
1	In the last month, how often have you been upset because of something that happened unexpectedly?	77 (24.6)	44 (14)	103 (33)	36 (11.5)	52 (16.6)
2	In the last month, how often have you felt that you were unable to control the important things in your life?	55 (11.6)	43 (13.7)	69 (22.1)	73 (23.3)	72 (23)
3	In the last month, how often have you felt nervous and “stressed”?	21 (6.7)	39 (12.5)	71 (22.7)	82 (26.2)	99 (31.7)
4	In the last month, how often have you felt confident about your ability to handle your personal problems?	28 (8.9)	30 (9.6)	106 (33.9)	62 (19.8)	86 (27.5)
5	In the last month, how often have you felt that things were going your way?	72 (23.07)	81 (25.9)	101 (32.3)	23 (7.3)	35 (11.2)
6	In the last month, how often have you found that you could not cope with all the things that you had to do?	47 (15.06)	69 (22.1)	72 (23.07)	91 (29.1)	33 (10.5)
7	In the last month, how often have you been able to control irritations in your life?	36 (11.5)	61 (19.5)	121 (38.7)	52 (16.67)	42 (13.4)
8	In the last month, how often have you felt that you were on top of things?	63 (20.1)	97 (31.08)	88 (28.2)	41 (13.1)	23 (7.3)
9	In the last month, how often have you been angered because of things that were outside of your control?	30 (9.6)	42 (13.4)	60 (19.2)	81 (25.9)	99 (31.7)
10	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	20 (6.4)	46 (14.7)	80 (25.6)	80 (25.6)	86 (27.5)

Source: Survey

Figures in brackets represent percentage

The above analysis reveals that majority 33 percent showed stress because of the unexpected happenings and 16.6 percent stressed very often. The reason for this might be due to the information through media, peer groups, family or own misconceptions about the pandemic. As per the research findings of the previous year's conducted on the students pursuing courses in the universities concluded that the experiences during pandemic induced fear related to losing loved ones in the family (Hussain, 2020). The level of stress caused was also high due to the fear of quarantine and isolation including changes in daily habits and routines.

Global pandemic caused psychological stress a situation where an individual perceives that controlling environment or the external factors are beyond the capacity (Cohen et al 2007). The study observes this tendency where 46.3 percent of the sample (23.3 + 23) often felt that they were unable to control important things in their life. Further 57.9 percent (26.2 + 31.7) felt nervous and stressed all the time due to pandemic situations. The reasons can be attributed to the risk of exposure to Covid variants, concerns about members of family infecting, home isolation, ambiguity in progression of education etc (AlAteeq, 2020). These tremendously grown fears resulted in high stress levels amongst students. (Ahmed, et al, 2018)

Further the study observes that 29.1 percent of the sample could not cope with the prevalent situations and 23 percent managed sometimes. 57.6 percent (25.9 + 31.7) of the sample showed signs of anger as things were beyond their control and 53 percent of the sample (25.6 + 27.5) felt difficulties were piling up and they could not overcome them as they are mentally stressed. The level of the anxiety and depression as the adaptation to the new circumstances was difficult (Robin, 2019). As students, there were worried about education. Most of the students could not cope with the online mode of education as the system was new to them, thus not satisfied. Interestingly 47.3 percent of the sample (19.8 + 27.5) felt confident and were able to handle their personal problems where as 33.9 percent could handle sometimes. 32.3 percent of the sample sometimes felt that things were going on their way and 18.5 percent often felt that things were under their control. The study also observes that 38.7 percent of the sample was able to control irritations in their life and 30 percent (16.67 + 13.4) was often able to control. A sample of 31.08 percent never felt that they were on top of things and 20.4 percent (13.1 + 7.3) of the sample often felt and 28.2 percent sometimes felt.

**Table No 5. Perceived Stress Scale (N= 312)**

Perceived Stress	Frequency
Low Stress ( 0 – 13 )	54 (17.3)
Moderate Stress ( 14 – 26 )	166 (53.2)
High Stress ( 27 – 40 )	92 (29.4)

Source: Survey

Figures in brackets represent percentage

As per the analysis more than half of the sample 53.2 percent had moderate stress and 29.4 percent had high stress and 17.3 percent had low stress. Further analysis is presented in the following table which depicts perceived stress of the respondents based on gender and age of the respondents

**Table No.5 Gender and Stress Levels amongst Students**

S.No	Gender	Low Stress	Moderate Stress	High Stress	Total	P Value
1	Male	18 (33.3)	88 (53.1)	58(63)	135 (43.2)	0.05
2	Female	36 (66.7)	78 (46.9)	34 (36.9)	177 (56.7)	
	Total (N)	54	166	92	312	

Source: Survey

Figures in brackets represent percentage

As presented in the above table based on gender and perceived stress, male students are highly stressed (63 percent) than female students (36.9) during the pandemic. 66.7 percent of the female had low stress where as 33.3 percent of the male perceived low stress and 46.9 percent of the female and 53.1 percent of the male were moderately stressed. Interestingly the results show that the overall stress levels are high for female students and p value confirms significance association between gender and perceived stress.

**Table No.6 Age and Stress Levels amongst Students**

S.No	Age	Low Stress	Moderate Stress	High Stress	Total	P Value
1	15 – 18 Years	22 (40.7)	68 (40.9)	45(48.9)	135 (43.2)	0.05
2	19 – 22 Years	32 (59.2)	98 (59)	47 (51)	177 (56.7)	
	Total (N)	54	166	92	312	

Source: Survey

Figures in brackets represent percentage

The above analysis reveals that the stress levels are low in the age group of 15-18 years, it is 43.2 percent, and students pursuing intermediate are covered under this category. 56.7 percent perceived stress is observed in the age group of 19-22 years, those pursuing graduation falls under this category. The table shows that there is consistency in the stress levels based on age group. The p value shows that there is association between age and perceived stress.

## Findings and Conclusions

The study finds that majority of the sample 82.6 percent showed moderate to high stress levels during pandemic period. Student community was drastically affected due to lockdown, home isolation, closure of educational institutions, online classes etc. Students were not able to cope with online methodology of teaching as they were used to physical or otherwise face to face teaching with personal attention and interaction with the faculty. They were not happy and satisfied with the online classes as it affects their performance in the examination and scores. This really stressed students and affected their mental health which is evident as per the results. Online

classes were technology driven which required modern gadgets like smart phones, broadband with continuous connectivity so on which was an added burden to the family to meet the requirements during pandemic where revenue resources were not continuous or blocked due to lockdown. This also added to the stress of the students.

In the present study intermediate students showed less stress than the under graduate students this can be due to the fact that the pandemic might affect their future plans like higher education, placements, future concerns etc. As per the gender female (56.7) percent showed higher stress levels one reason for this can be due to higher composition of female sample in the study and the other might be due to the household responsibilities, parental pressures, scores in board examinations, emotional balances, expression of thoughts etc

### Limitations

The study is based on the responses collected through Perceived Stress Scale (PSS-10) which was developed by Sheldon Cohen. Sample for the study was selected using simple random sampling technique. The data was collected through Google forms via online link. The responses collected might be biased as it is the self-analysis of the participants. Perceived stress might be due to other related factors which are not considered for the present study.

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