

# The Assessment of Perceived Stress during Lock-down Due to COVID 19 among Students

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**Abstract:** The international epidemic COVID 19 is the concern for public and poses many psychological challenges. The research data are required to tackle the adverse effect due to COVID 19 during lockdown situation. The crisis has affected the entire world, which has increased the stress levels amongst the students, employees, corporate managements, traders, farmers etc. All the citizens are facing different problems due to COVID 19 and lockdown. The study is specifically focused on students and main aim of the study is to assess the Perceived Stress amongst students of higher education in India. The 30-Item Perceived Stress Questionnaire (PSQ) along with questions on demographics was used to gather the data from the respondents. The online survey was conducted using Snowball Sampling technique due to lockdown condition in India. The study included 280 respondents from major cities in India. The result concludes that the perceived stress during lockdown due to COVID 19 ranges from moderate to high amongst these participants surveyed. The perceived stress does not vary with gender of respondents, but the perceived stress varies with age of the respondents. The major reasons identified using Friedman test are irritation, feeling agitated etc.

## 1 INTRODUCTION

Perceived Stress is the thoughts or feelings that individual has about how much stress they are under at a given point of time. "The Perceived Stress is the degree to which situations in one's life are appraised as stressful".


The students pursuing higher education experienced the stress during lockdown due to COVID 19, the various factors contribute to the perceived stress are online examinations, practical examinations, online lecture series, lack of social interaction, academics, performance in test and exams, future uncertainties.

Perceived stress amongst these students who develop the uncontrollable and unpredictable life situation that often leads to frustrations, irritations and hinders the confidence level while dealing with those difficulties and uncertainties. The perceived stress is the individual feelings developed when they face stressful situation and suffer negative life events. The perceived stress is not just understanding the stressful life experiences but also assessing the degree

to which life events are more stressful during such crisis.

## 2 LITERATURE REVIEW

Financial constraint and pressure to maintain a lifestyle, manage the expenses at student level is the reason for stress among the students followed by pressure to be competitive in their academic performance. Assistance from faculty mentors and environment at the academic institution works as a stress buster (Debra L Nelson, & Ronald J Burke, 2000). Insecurity about getting lower grades in academic performance as well as students who tend to be employed and parallelly pursuing their education face stress as they have to balance between their work and academic and their activities. Their ability to participate in the curricular activity is limited compared to students who are only concentrating on academics (Brown & Edelman, 2000). Choice of program opted for the studies, domain or area of education can result in stress among

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students as academic programs vary in terms of curriculum and the level of preparation for respective courses change in accordance with the same (Lori J. Kane, 1997). Individuals are known to experience stress mainly due to their perception of being stress and due to academic curriculum among students, this could result in psychological problems as well as physiological issues (Beck DL, Srivastava R, 1991)

Studied the perceived among students. As per the study the students pursuing postgraduate program are known to face higher level of stress and the situation has become quite alarming for institutions and universities as retention of students and their continuity in the academic has reduced over years. Pressure of being employed, job opportunity in the market, and stress of being competitive are few reasons for stress among students pursuing post-graduation program (Mane Abhay B, Krishnakumar MK, Niranjan Paul C, Hiremath Shashidhar G, 2011). Work environment at academic institutions has become stressful over a period of time for reasons such as job insecurities, Lack of commitment from employee as well as employers' perspective, work relationships, availability of resources at work, communication structure etc. (David Robotham, Claire Julian, 2006).

Evaluated the reasons for increased stress. The study says unhealthy behaviour such as over consumption of fat diet, smoking, drinking alcohol as a strategy for overcoming stress is resulting in increased health problems among adults. Stress and health problems experienced by adults are interrelated with each other (Tytherleigh et al., 2005). Stress level of students during their academic program varies depending on the year of program pursued by them as students close to completion of program are known to have faced more stress. Male students face psychological disturbance which results in higher stress levels when compared to female students (Ng DM, Jeffery RW, 2003). Their study proved that stress resulted in decline of academic performance of the students and few major sources of stress among students were academic performance, curriculum routine, criticism from faculty at the institute, institution rules and regulations, fear of being unemployed etc. Women employees tend to face higher risk compare to their male counterpart due to increasing leadership roles at work and as employed women are expected to balance between their personal and professional life compare to that of male employees (Naidu R S, Adams J S, Simeon D, Persad S, 2002).

Lifestyle, family conflicts, social status are few of the major reasons for stress faced by individuals.

Individuals have known to push themselves to do financially better with an assumption that they can enjoy their life and comparatively face less stress. A relaxed lifestyle, social environment social equalities, consciousness towards healthy living are some key tactics to reduce stress levels (Prangya Paramita Priyadarshini Das, Rajkumar Sahoo, 2012). Students mainly face stress in their academic life due to physical reasons as well as pressure to excel in academics. Many students have agreed about talking to family, sleeping, watching TV, Listening to music as a major source of stress buster and also students indicate support from academic institution to provide a counsellor to guide the students during the period of stress (Roqayeh Aliyari, Hamidreza Roohafza, 2012).

Factors that lead to stress among students are pressure to perform better in academic course, their perception of academic load and examinations, time constraints to prepare and perform in limited duration, perception about individual's ability etc. Support of the faculty fraternity plays a crucial role in developing confidence among students to perform better which helps them in coping with stress (Patrick M. Gallagher, 2015). Ability of a student to enjoy and experience pleasure in the environment around them or based on their interest level in their day-to-day activities may be related to the perceived stress and restoration. Perceived stress in a student is also related to their ability to perform or be productive in the task performed by them (Dalia Bedewy, Adel Gabriel, 2015).

Students pursuing master's program are usually under immense stress due to personal and professional reasons that can have a negative impact on academic performance of an individual, their emotional stability, and mental as well as general health. Students are observed to be practicing positive lifestyle strategies to cope up with stress (Kate Brough, 2015). Male students have higher level of depression compare to that of female students whereas stress levels faced by students tends to be the same irrespective of their gender. Male students stress gets into the level of depression as they have less tendency to share the reasons for their stress in friends circle or family (Ammar Awadh et al., 2013).

Self-efficacy of an individual has an impact on perceived stress and life satisfaction. An individual or a student mainly experiences stress depending on the environment around them if the environment is controllable the perceived stress is said to be lower when compare to uncontrollable environment (Joey Man Yee Kwok, Douglas Kei Shing NG, 2016). Individuals experience stress mainly due to personal and occupational reasons that could hamper

professional growth of an individual and productivity from employer's perspective. Individuals indicate exercise, spending time with family, yoga, meditation, spirituality to be helpful for coping with stress and few initiatives that can be taken by the employer to help employees deal with stress are Employee assistance program, Stress intervention programs, vacation etc. (Jieun Lee, EunYoung Kim, Amy Wachholtz, 2016)

Evaluated the predictors of stress among students. According to the study students mainly face stress during their academic career due to the area of study chosen by them and its popularity among youth. Female students face higher level of stress than male students due to pressure to perform from family and it is observed that stress usually results to the stage of depression. Counseling session held at the institute level can help the students in coping with stress related to academic performance (Dalia Saleh, Nathalie Camart Lucia Romo, 2017).

The stress occurs among students mainly due to the pressure of performing effectively in their academic curriculum in limited period. Individuals who intended to cope with stress diverted their mind towards religion, lifestyle and non-acceptance, denial, self-blame were few indicators observed among students those are maladaptive to stress (Lakshmi Rajesh, Ananda Reddy Endreddy, Subhani Shaik, Bhagawan Rajana, 2017). The demographic or biographic profile of the students such as age, gender has an influence on stress level of students and also factors such as clarity about employment, caring for others, self-direction for preparation for academic has relationship with the level of stress experienced and females students face higher stress in post-graduation program compare to that of male students (Luma Ghazi Al Zamil, 2017). Individuals in the academic phase of their life are known to experience high level of stress due to insecurities related to their career and are prone to problems such as anxiety, mental stress, emotional imbalance and this behaviour is commonly observed among students in the age group of 18 to 29 years (Matthew Peter Shaw, Daniel James Peart & Orrin James William Fairhead, 2017).

The students tend to experience stress in their academic career mainly due to perform well in academics. Female students undergo higher stress compare to that of male students and individuals who are isolated, disengaged, who blame themselves for problems around them exhibit negative stress compared to students who are religious, socializing and minimal planning (Zohair et al, 2018). The relationship between perceived stress, burnout, coping pattern and psychopathology among students.

According to the study, fear of failure, ability to have interpersonal challenges with the tutor, faculty student relationship, availability of study facilities are some common reasons for stress among students. Meditation, training in life skills, yoga and other tactics could be helpful for students to cope with stress (K. V. Guruprakash, S. G. Mehta, Bajpai Atul, Jyoti Prakash, K. J. Divinakumar, S. A. Khan, and P. Patra, 2018).

The quality of life of students will have an impact on stress levels of students to certain extent but sleeping disorder, burnout, depression, stress to perform better are even more impactful which could deteriorate stress further (K. Jayasankara Reddy, Karishma Rajan Menon and Anjana Thattil, 2018). The stress and quality of life among university students. It concludes that lack of self-discipline and time constraint to concentrate on self are few key reasons for stress among females, experts indicate the necessity for health education interventions to be taken by the academic institutes to help female students to cope with stress. Students pursuing higher education pass through various levels of depression such as moderate, mild mood swings, clinical depression, severe and extreme depression. Student assistance program, counseling program held at the institute level can help students to come out of depression (Icaro, J S Ribeiro et al., 2018).

The prevalence of depression among Afghan university students tend to face stress mainly due to reasons such as their master's program, area of specialization, job opportunity depending choice of domain. Level of self-esteem in an individual, his or her feeling of satisfaction in life, self-efficacy, ability to handle psychological distress were certain factors that indicate stress level among students (Bakhtyari Mohammad Basir, Mutamed Mohammadullah, Bena Ahmadsha, 2018).

### 3 RESEARCH METHODOLOGY

Descriptive research design was adopted in the study to gain insight into the perceived stress experienced by the students during lockdown period between April-May 2020 in India, due to COVID 19. A total of 280 sample students-respondents pursuing their higher education were chosen following snowball sampling method and collected responses by administering Perceived Stress Questionnaire (PSQ) which consist of 30 items.

PSQ consist of 30 items indicate on the scale from 1 to 4, where 1=almost never, and 4=usually for each statement and these questionnaire emphasis on the

respondents perceived stress during recent times. The scoring is done according to the selection of respondents, the items such as 1, 7, 10, 13, 17, 21, 25, 29 are scored 5. The perceived stress index is calculated using the formula. PSQ Index = (raw score -30)/ 90. The scoring yields the score between 0 and 1. Higher the score, higher will be the stress level amongst respondents. To check the reliability of the scale and statements, Cronbach's Alpha test was used in SPSS. It was found that PSQ is reliable with value 0.859 for 30-item statement.

Table 1: Reliability Statistics.

Cronbach's Alpha	N of Items
.859	30

### 3.1 Research Objectives:

#### 3.1.1 Objectives of the Study:

1. To assess perceived level of stress experienced by higher education students during lockdown due to COVID 19
2. To identify the reasons for perceived stress amongst these students during lockdown
3. To analyse the perceived stress amongst higher education students across age and gender.

## 4 RESULTS

### 4.1 Respondents Profile

Table 2: Demographics of the Respondents.

CHARACTERISTICS		Frequency	(%)
Gender	Female	128	46
	Male	152	54
Age	< 20	21	7.5
	21	90	32.1
	22	43	15.4
	23	62	22.1
	24	53	18.9
	25	7	2.5
		4	1.4

Table 2, the demographic profile of samples indicates that 54 per cent of respondents are male (152) and the rest 46 per cent are female (128) out of the total of 280 and majority of the respondents belong to the age group of 18 – 25 Years

### 4.2 Descriptive Analysis

Table 3: Descriptive Scores.

Sl. No	Questions	Score
1	You feel rested during lockdown	5.0
2	You feel that too many demands are being made on you	2.0
3	You feel irritable during crisis	2.3
4	You have too many things to do	2.5
5	You feel lonely and isolated	2.0
6	You find yourself in the situation of conflict	1.8
7	You feel that you are doing things that you really like	5.0
8	You feel tired	1.9
9	Your fear that you may not able to manage to achieve goals	2.0
10	You feel calm	5.0
11	You have too many decisions to take	2.5
12	You feel frustrated	2.1
13	You are on full energy	5.0
14	You feel tensed	2.0
15	Your problem seems to be piling up	2.1
16	You feel that you are in hurry	1.7
17	You feel safe and protected	5.0
18	You have too many worries	2.1
19	You are under pressure from others	1.8
20	You feel discouraged	1.7
21	You enjoy yourself	5.0
22	You are afraid of future	2.3
23	You feel you are doing things because you must not because you want to	2.1
24	You feel criticized or judged	1.8
25	You are light-hearted	5.0
26	You feel mentally exhausted	1.9
27	You have trouble in relaxing	1.8
28	You feel loaded down with responsibilities	2.1
29	You have enough time for yourself	5.0
30	You feel under pressure from deadlines	2.1

$$\begin{aligned}
 \text{PSQ Index} &= (\text{Raw score} - 30) / 90 \\
 &= (84.6 - 30) / 90 \\
 &= 0.607
 \end{aligned}$$

The PSQ Index is drawn from raw score which is 0.607. The PSQ Index value ranges from 0 to 1. Higher the Index score, higher will be the stress level. The raw score indicated the level of stress during lockdown due to COVID-19. Higher the scores,

higher the level of perceived stress. The perceived stress ranges from moderate to high perceived stress amongst these survey respondents during this COVID 19 crisis.

### 4.3 Friedman Rank Test:

Table 4: Ranks.

Reasons for Perceived Stress during lockdown	Mean Rank
Too Many Demands on you	6.61
Feeling Irritable	8.03
Too many things to do	8.63
Feel lonely and isolated	6.59
Feel Tired	6.51
Fear of not achieving goals	6.84
Feeling frustrated	7.33
Feeling tensed	6.87
Too many worries	7.18
Feeling discouraged	5.25
Afraid of future	7.98
Feeling mentally exhausted	6.17
Feeling under pressure from deadlines	6.99

Table 5: Test Statistics

N	280
Chi-Square	145.631
Df	12
Asymp. Sig.	.000

a. Friedman Test

Friedman Rank test shows the ranks assigned by respondents; it represents the rank information of the data given by the respondents. The Friedman test was used to determine the various factors (reasons) to perceived stress. The respondents perceived stress according to their reasons that caused stress by the survey participants. It is observed from the table 4 that the students assigned the highest rank to “too many things to do” reason as the cause of their stress with mean rank 8.63, followed by “feeling of irritation” with 8.03. The next reason quoted for their stress was “afraid of future” which occupies mean rank of 7.98 and “feeling discouraged” was given the least rank which is 5.25.

The chi-square table 5 shows that there is significant difference between these factors at significant value 0.00. Since the significance value is

less than 0.01, it is concluded that the mean ranks of these factors are not same.

The respondents felt that they have too many things to do, which is causing perceived stress. When the students feel that they are not able to prioritize and assign importance to concentrate on too many things and execute the task, the stress level increases. This may cause irritation during crisis. It may be due to lockdown, staying at home, lack of social interaction, not able to access to the basic requirements, addiction to internet and social media. The uncertainties about future, downfall in economic condition, lack of job opportunities, worried about examinations, online classes, and academics, not able to achieve goals, which creates fear about the future.

### 4.4 Analysis of Variance – One Way ANOVA:

**Objective:**

- To analyse the perceived stress amongst higher education students across age and gender.

**Hypothesis:**

The perceived stress amongst higher education students across age and gender remains same.

Table 6: Gender \* Age Crosstabulation

Count		Age							Total
		<20	20	21	22	23	24	25	
Gender	Male	9	53	22	37	25	4	2	152
	Female	12	37	21	25	28	3	2	128
	Total	21	90	43	62	53	7	4	280

In terms of Gender, the percentage of males aged 20 is 53 (35%), which is larger than that of females in the same age (28%). The percentage of females aged 23 and over is 22%, which is larger than that of males in the same age group (16%)

Table 7: ANOVA Table.

Perceived Stress		Perce nt	F	Sig.	Hypothesis
Gende r	Male	54	0.177	.675	Unsupporte d
	Femal e	46			
Age	< 20	7.5	4.21		Supported

	20	32.1			
	21	15.4			
	22	22.1		0.0	
	23	18.9		0	
	24	2.5			
	25	1.4			

The feeling of irritation during crisis is same across males and females with significance value 0.675. It means that irrespective of being males or female’s respondents, both experience the same level of perceived stress when encountered with difficulties in the life events. The feeling of irritation during crisis varies significantly across different age of the respondents with the significant value 0.00. Hence the result can be interpreted that, the perceived stress differs across different ages but remains same amongst males and females.

Table 8: Perceived Stress \* Age.

Count	Age							Total
	<	2	2	2	2	2	2	
Perceived Stress	21	90	43	62	53	7	4	280

The table 8 shows that the perceived stress is more amongst the students whose age is in the range 20 to 23. The students who are in the age group 20 has experienced more perceived stress. Further research can be conducted to have deeper understanding about the age and perceived stress.

#### 4.5 Discussion and Implications

The research reveals that the perceived stress amongst these students ranges from moderate to high with the PSQ Index 0.607. The perceived stress remains same amongst the males and females. It means the perceived stress does not differ amongst males and females. But result also shows that the perceived stress varies with age. The feeling of irritation, frustration, worries, uncertainties of future, too many demands, too many things in life, feeling tensed, tired staying at home, feels mentally exhausted, feels

pressured due to deadlines, fear of future, are the major reasons for perceived stress.

### 5 CONCLUSIONS

The study focused on understanding stress experienced among Higher Education students especially during the lockdown period and what could be the possible repercussions of the same and if the stress experienced by the students had an influence with relation to age and gender. The study was supported by relevant reviews in the area for framing the hypothesis and data analysis substantiates that students of higher education do experience stress due to various reasons such as not being able to prioritize work, feeling agitated, sceptical about future opportunities due to lockdown which varied among the students whose age is between 20 to 23 years. Academic Institutions as well as students should put collective efforts towards coping up with stress in lockdown situation. Students should be counselled and mentored by faculty members at the institute for guidance on academic performance and boost their morale to confident about being successful in future endeavour. Brown H, E Delmann R (2000) Individuals life style has a major impact on mental health hence students should engage in physical fitness in the form of routine workout, listening to music, practising yoga. K. Jayasankara Reddy, Karishma Rajan Menon and AnjanaThattil (2018). Hence handling stress at a student’s level is mainly possible by culmination of stress coping strategies from academic institution and students.

### 6 LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The study was focused mainly on assessing the perceived stress level of higher studies students, also to understand the various underlying reasons for perceived stress using perceived stress questionnaire consist of 30-item questions from 280 respondents. The research also focused on analysing the perceived stress level amongst males and females. The study focused to understand the perceived stress level during pandemic situation caused due to COVID 19. The data was gathered through referrals of referrals from survey respondents using snowball sampling. The further research can focus on identifying the coping strategies during such crisis. The negative life events disturb causing irritation and frustrations

amongst the common people as well. So, the study can focus on general public by increasing the sample size to have accurate results.

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