

Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises:
A Study of College Students and Faculty Members of Faridabad District

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Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises: A Study of College Students and Faculty Members of Faridabad District

Dr. Shilpa Goel

Dean & H.O.D, Department of Management
Aggarwal College Ballabgarh, Faridabad-121004
manageme.researchp@gmail.com

Mr. Raghav Kumar Jha

Assistant Professor, Department of Management
Aggarwal College Ballabgarh, Faridabad-121004
fmguru.rahav@gmail.com

Abstract

When, on 11th January 2020, COVID-19 declared as pandemic by world health organization, we even could not imagine the situation world had faced. Pandemic emerged as one of the major physiological and psychological health crisis of the decade. It affected the lifestyle of the millions of college going students and faculty members as well. All the teaching, learning and assessment procedures had been replaced by hi-tech educational technologies (e-Technology). Online classes took place of traditional face to face classes, eBooks replaced the paperback books and online assessment took place of pan-paper based assessments. Previous researches suggest, college going students are most vulnerable and sensitive to the mental health problems because apart from the current pandemic they have to face other multiple stressors as well such as academic pressure, assessment and university exam, career prospects, concern about health of self and family members, poor relationship with faculty members.

However, now when colleges in India have reopened again and offline (face to face) classes are being taken by most of the colleges of Faridabad district, it is the prime responsibility of college administrations and faculty members to ensure the prevention of any kind physical (covid infection) and / or psychological (Mental Stress, Anxiety and Depression) damages to the students. The objectives of the current research work are to evaluate the mental health of the college students (Perceived Stress) after reopening of colleges using perceived stress scale and also to identify the strategies being used by colleges to minimize the mental stress and strengthen the mental health of the college students.

Keywords: Perceived Stress, Mental Health, COVID-19, College Students, Faridabad

Methods

Study Design

Understanding the mental health and level of stress of college going students is utmost importance for the college administration and professors to make the policies for the betterment of students and make them ready to attend the class. The first objective of the study is to empirically investigate the level of perceived stress of the college going students of Faridabad district and second one is to find the different strategies used by the colleges to cope up with mental health and strengthen the mental health of students. Firstly, we conducted a web based survey to analyze the mental health of the students. In addition, we also conducted a semi-structured interview with students and professors of different colleges of Faridabad district to capture the different ways to cope up with post covid-19 stress of the college going students. The students were voluntarily invited to be part of the research by filling out a survey form through google form (https://docs.google.com/forms/d/e/1FAIpQLSdSIW4NLABvsaVEv1vxnpVbp7W-cGCKfVGxhfXGlvPQE5Xzw/viewform?usp=sf_link) which was circulated through email address and WhatsApp of the students.

To determine the level of perceived stress associated with current situation, we determined the stress level of students using the Modified Perceived Stress Scale-10(PSS). Most of the researchers prefer PSS scale to measure the stress perception of young respondents. PSS is one of the widely used assessment tool for measurement of stress level among the college students.

Procedure:

We have divided our research work into two parts, In the first part, a google form was circulated to conduct an online survey for determining the level of perceived stress and the impact of opening of colleges post covid-19 on the mental health of the college going students. For this we subdivided our research questionnaire into three different sections. In the first section, demographic information (such as gender, age, place of living, course name, college name, academic year) of respondents were collected. In the second part of the questionnaire we asked some social and financial related questions such as, financial position of the family, source of earning, affection with college and relationship with professors and classmate in college. Third section includes Perceived Stress Scale to measure the level of perceived stress among the respondents. Perceived Stress Scale includes 10 questions (4 Positive and 6 Negative) relating to the respondent's perception and thoughts about different situations during last most. The respondents were instructed to read the questionnaire carefully and rate the statement as per their preference using five-item Likert scale ranging from 0-4, where 0 refers to above statement "Never" apply to me, 1 refers to above statement "Almost never" apply to me, 2 refers to above statement "Sometimes" apply to me, 3 refers to above statement "Fairly often" apply to me and 4 refers to "Always" apply to me. Total score of PSS determines the level of perceived stress among the participants. A score less than or equal to 13 would be consider as low perceived stress, score falling between 14 and 26 would be moderate perceived stress and the score more than 26 would be considered as high perceived stress among the participants.

In the second part of the research we try to find out the role of educational institutions (college) and faculty members in strengthening mental health of the college students. For the

Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises: A Study of College Students and Faculty Members of Faridabad District

aforesaid objective, a semi structured interview was conducted with the assistant professors, associate professors, department heads and students from different colleges. The interview aimed to identify the different ways through which mental stress of the students can be reduced. We also try to identify the different strategies used by the colleges to strengthen the mental health of the college students.

Participants

College students of Faridabad district in the age group of 18-30 years were invited to participate in the research work. Total 422 students were participated and submitted their response through google form. Out of which 8 boys and 4 girls had been discarded since they were not pursuing and degree course from Faridabad district. Therefore, we consider only 410 students for research analysis purpose. There were 160 female respondents, 250 male respondents, 318 students of first year of their college and 92 students were seniors. The mean age of respondents were 19.09 years (SD = 1.956), mean age of male respondents were 19.10 years, mean age of female respondent were 19.09 years. We have average 40% respondent from Aggarwal college, Ballabgarh and remaining respondents from different colleges of Faridabad district. The google form (survey form) includes the respondent's demographic information, such as age, gender, place of living, course name, college name, academic year as well as other information such as financial position of the family, relationship of respondent with professors, attendance in college. Approx. 73% respondent were BBA & BBA (CAM) students, 16% respondents were M.B.A and remaining respondents were law, commerce and hotel management students.

Data Analysis

Firstly, we compiled the qualitative data to describe the demographic variables of the sample collected. The quantitative data (such as average number of male and female respondent, average age of respondents, Standard deviation) was analyzed using MS-Excel software. Perceived Stress Scale (PSS) were used as an analysis tool to measure the perceived stress level among the participants. A sum total of the score of each participant was calculated by reversing the score of (all positive questions) question number 4,5,7 and 8 and then by adding all 10 the questions. A PSS score anywhere between 0 to 13 represents low perceived stress, score between 14 and 26 represents moderate perceived stress and a score between 26 to 40 or above represents high perceived stress among the participants. Apart from the PSS, standard deviation and Pearson correlation were used to understand the relationship between mental stress level and different variables such as age of the respondents, Income of the family etc.

Results

Sociodemographic and academic particulars of the respondents

Table 1: Sociodemographic and academic particulars of the respondents.

SI No.	Particulars	N	%	Mean PSS
Age				
1.	Below 19	190	46.54	18.89
	19 to 21	190	46.54	19.24

	22 & Above	20	4.878	22
Gender				
2.	Female	160	39.02	19.60
	Male	250	60.98	20.11
	Total	410		
Place of living				
3.	Urban	225	54.88	18.78
	Rural	185	45.12	19.23
	Total	410		
Academic year				
4.	First Year / Semester	275	67.07	19.1
	Second Year / Third Sem.	70	17.07	19.75
	Final year / Semester	65	15.85	19.67
	Total	410		
Major Course				
5.	MBA	15	3.67	19.89
	BBA	210	51.22	19.08
	BBA(CAM)	115	28.05	18.91
	LAW	32	7.80	18.08
	BHM	24	5.85	21.06
	Other	14	3.41	18.96
	Total	410		
Final year Students				
6.	Yes	145	35.366	35.37
	No	265	64.634	64.64
	Total	410		
Do you attend your college regularly?				
7.	Yes	365	89.024	19.21
	No	45	10.976	19.33
	Total	410		
Do you attend all the classes after coming to the college?				
8.	Yes	345	84.15	18.96
	No	20	4.88	27.67
	Most of the time	45	10.98	18.14
	Total	410		
Relationship with College Professors				
9.	Very Good	235	57.32	19.11
	Very Bad	40	9.75	20
	Its Ok	135	32.93	19.15
	Total	410		
Financially Independent				

Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises:
A Study of College Students and Faculty Members of Faridabad District

10.	Yes	24	5.85	18.84
	No	386	94.15	20.21
	Total	410		
Family financially Stable				
11.	Very much stable	65	16	17.78
	Not so much stable	140	34	19.75
	Unstable	205	50	20.92
	Total	410		

The socio demographic particulars of the respondents have been exhibited in Table 1. Total sample consisted of 410 students. Out of which 60% (N=250) respondents were male students and 40% respondents (N=160) were female. Majority of respondents (92.69%) were ≤ 21 years of age, only 20 (7.31%) respondent have ≥ 22 years of age. A total number of 225 (55%) respondents were from urban area and 185 (45%) were rural residents, 94% respondents were financially dependent on their family members. Moreover, 16% respondents have financially very strong family, 34% respondent has not so much financially strong family background and remaining 50% respondent has financially very unstable family background. Among the sample, 145 (35.366%) respondents were final year students, 89.024% respondents regularly attend the college whereas 11% students have attendance shortage, 84% respondent attend all the classes after coming to college however 5% respondents have regular absent in one or more lectures. A total of 235 respondents have very good relation with their professors, 40 students have reported very bad relation with their professors and 135 students have average relation with their professors. 15 were pursuing MBA, 210 were pursuing BBA, 115 were pursuing BBA(CAM), 32 were pursuing Law graduation, 24 were doing graduation in hospitality and 14 respondents were pursuing some other courses.

Table: 2 Post COVID-19 perception of respondent

SI. No.	Particulars	N	%
Worried that COVID-19 can take an unexpectedly dangerous and frightening form.			
1.	Very much	175	42.68%
	Not so much	140	34.15%
	Not worried	95	23.17%
	Total	410	
Do you think your studies have been affected due to Pandemic?			
2.	Yes, it had negative effect on my studies.	270	65.85%
	It has only a nominal effect.	65	15.86%
	No, it has no effect on my studies.	75	18.29%
	Total	410	
Are you worried that your job prospects will be affected due to COVID-19?			
3.	Yes, I'm worried	240	58.54%
	I'm not worried so much.	110	26.83%
	I am not worried.	60	14.63%

	Total	410	
felt nervous and stressed due to the opening of college before third face of COVID-19.			
4.	Very much	185	45.12%
	Not so much	95	23.17%
	Not worried	140	34.15%
	Total	410	

Post COVID-19 perception of the respondents has been shown in Table -2. When asked about the worry regarding possible third wave of pandemic, 43% students reported being stressed because they think, the pandemic may take an unexpectedly dangerous and frightening form, while 43% respondents have little worried and 23% respondents felt that the worst phase of COVID-19 has been over and now there is no need to worry. When we asked about the effect of pandemic on education, 270 (66%, M=19.38) respondents felt that it has negative effect on the study, 65 (16%, M=17.25) respondents reported that it has only a nominal effect on their study, while 75 (18%, M=19.38) respondents believe it has no effect on their study. The current study shows that 59% respondents are worried that their career (job prospects) would be affected by pandemic, 27% respondents are little worried about their job prospects, while only 15% of college going students believe that pandemic has no effect on their job prospects. Altogether, 85% of the final year students reported moderate perceived stress (N=55, M=19.45) due to the negative impact of pandemic on their job prospects. The analysis of data shows that almost half of the respondents (n=185, %=45%) were very stressed due to opening of college before complete vaccination, 33% respondents were somewhat worried about opening of college before complete vaccination however, a large group of college going students responded that they were not worried about the opening of college before complete vaccination.

Table 3. Overall Perceived Stress Score

SI No.	Stress Level	Frequency (N)	MeanPSS Score	Percentage (%)
1.	High Perceived Stress	40	31.71	9.76%
2.	Moderate Perceived Stress	295	19.93	71.95%
3.	Low Perceived Stress	75	11.33	18.29%
	Total	410		100%
4.	High Perceived Stress			
	Male	30	27.67	12%
	Female	10	27	6.25%
5.	Moderate Perceived Stress			
	Male	185	19.9	74%
	Female	110	20	68.75
6.	Low Perceived Stress			
	Male	35	10.75	14%
	Female	40	11.78	25%

Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises: A Study of College Students and Faculty Members of Faridabad District

The result of the current study shows that, majority of the college going students are experiencing (81% respondents) mental stress due to the situation arises because of pandemic. Table 3 summarized the total level of stress (PSS Score) among the respondents, out of 410 respondents, 40 students (%=9.76%, M=31.71) experienced high perceived stress, 295 students (%=71.95, M=19.93) students while only 18% college going students experienced low level of stress (N=75, M=11.33). A total number of 40 respondents (31.71%) experienced high perceived stress, out of which 30 respondents were male (75%, M=27.67) and only 10 respondents (25%, M=27) were female. Similarly, 295 participants experienced moderate level of perceived stress out of which, 185 male respondents (% =62.71, M = 19.90) and 110 female respondents (% = 37.29, M = 20) have experienced moderate perceived stress.

It has been analyzed that average PSS score of all the respondents is 19.21, that shows that on an average all college going students have moderate level of perceived stress post COVID-19. The result of study suggests that, female respondents are in better position to manage their stress level as well as their mean PSS score is also lower than male respondents. The mean PSS score of the female respondents is 19.60 while the same score is 20.11 of male respondents. Our study also identifies that age has significant positive correlation with psychological stress level (PSS score) of students. Mean score of students of below 19 years is 18.89, 19 years to 21 years of age is 19.24 and above 21 years of age is 22. Female respondents have also shown perfect positive correlation between age and mean stress score. Similarly, the students who have financially stable family shown lower PSS score (N=65, M=18.75) as compare to those of having financially unstable family (N=205, M=20.28). The mean score of students who are financially independents (N=24, M=18.84) shown lower as compare to those who are dependent (N=386, M=20.21) on their family. It has been also identified that students from rural area (N= 185, M= 19.23) shown higher perceived stress than those are from urban area (N= 225, M= 18.78). Similarly, First and fifth semester students have higher PSS score as compare to third semester students. Mean PSS score of first and fifth semester students are 19.39 and 19.67 respectively whereas mean PSS score of third semester students is 17.75 only.

Post COVID-19 Stress Management

It has been observed that institutional and social (family) support has positive influence on the health and wellbeing of college students. Similarly psychological and financial variables have also positive influence on perceived stress among college going students. We found that participants who have good relation with their professors perceived lower stress as compare to those who have worse relation. The mean perceived stress score of the students from the colleges which provide job security to the students is comparatively lower as to the colleges which do not provide any job oriented short-term trainings (Job securities). When asked the stress coping strategy to the respondents with low mean PSS score, they reported academic, financially, psychologically, job security and security support from their college.

Regular Counseling Session:

The majority of respondents who experienced low to moderate risk feel lack of psychological support (counseling) from their faculty members. More than half of the respondents reported (N=

240 %= 58.54) that their regular interaction and counseling session with faculty members reduced stress significantly. Our interaction with faculty members of different colleges concluded that, most of the (approx. 57%) faculty members also feel happy and satisfied to help students to cope with their perceived mental stress. It has been seen that colleges which provide regular counseling session to their students shown lower PSS score as compare to colleges which do not have such facility. Management department of Aggarwal college Ballabgarh (College having lowest PSS score) has appointed one faculty member for each section as class mentor. Every mentor has to provide counseling to at least 5 students per day. We identified that 87% respondents from management department of Aggarwal college Ballabgarh reported low to moderate perceived risk with mean PSS score of 17.35 which is the lowest score among the business schools.

Flexible Fee Payment Options:

“Cost of the education specially college fees have risen significantly over the past few years”. College fees along with the other expenses such as cost of stationary, food (lunch), transport fees, and hostel fees act as one of the main stressors among respondents from unstable family background. One half of the respondents (N=205, %= 50%) reported moderate to high level of perceived stress (M=20.28) due to financial difficulties of their family. Some students expressed their concerned about semester fee, they revealed that they are unable to pay their full semester fees at a time. They need some flexible (installment) payment mechanism to continue their study. However, Post covid most of the colleges use flexible fee payment option as a primary tool to deal with mental stress of the students. It has been seen that colleges which provide flexible payment options to their students shown lower PSS score as compare to colleges which do not have such facility.

Free Short-term Job Oriented Training Programs.

The result of our study shows that more than half (59%) of the respondents are highly stressed that their career (job prospects) would be affected by pandemic, 27% respondents are little worried about their job prospects, while only 15% respondents believe that pandemic has no effect on their job prospects. Our study revealed that respondents from the colleges which provide free short-term job oriented training programs to their students shown lower perceived stress score as compare to colleges which provide only regular classes. The mean PSS score of the respondents from the colleges which provide free short-term job oriented training programs is 17.96 (N= 225, %= 54.88) and mean PSS score of the respondents from the colleges which do not provide free short-term job oriented training programs is 19.19 (N= 185, %= 45.12).

Findings

The primary objective of the current research work was to measure the perceived mental stress among the college going students and the role of educational institutions (colleges) and faculty members to strengthening the mental health of students. Findings of our research indicates that majority of the college going students are experiencing (81% respondents) some level mental stress. Our study also suggests that most of the college going students have moderate level of perceived stress with mean PSS score of 19.21. Table 4 represents the socio demographic variables and level of

Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises:
A Study of College Students and Faculty Members of Faridabad District

perceived stress among the respondents. Approx. 10% college going students (N= 40 M=31.71) experienced high perceived stress with mean PSS score of 31.71 and only 18% college going students experienced low level of stress (N=75, M=11.33). Furthermore, findings also indicate that boys' respondents experienced relatively high perceived stress(75%, M=27.67)), as compare to femalerespondents (25%, M=27).

Table 4. Socio Demographic Particulars and Level of Perceived Stress of Respondents

Variables	High Stress		Moderate Stress		Low Stress		Total %	
	N	PSS	N	PSS	N	PSS		
Gender								
Male	30	27.67	185	19.9	35	10.75	250	60.98
Female	10	27.00	110	20	40	11.78	160	39.02
Age								
Below 19	20	27.68	125	20.6	45	11.22	190	100
Male	15	27.67	65	20.92	15	10.00	95	50
Female	5	26.89	60	20.25	30	11.83	95	50
19 to 21	15	28	155	19.32	20	12.00	190	100
Male	10	28.5	110	19.32	10	13.00	130	68.42
Female	5	27	45	19.33	10	11.67	60	31.58
22 & Above	5	26	15	20.67	Nil	-	20	100
Male	5	26	10	19.5	Nil	-	15	75
Female	Nil	-	5	23	Nil	-	5	25
Place of Living								
Urban	10	27	175	19.69	10	11	225	100
Male	10	27	120	19.36	20	11	150	66.67
Female	Nil	Nil	55	20.45	20	12	75	33.33
Rural	25	27.8	120	20.30	30	11.17	185	100
Male	20	28	65	21	15	10.5	100	54.05
Female	10	27	55	19.55	20	11.5	85	45.95
Semester								
1 st Semester	20	28	205	20.20	40	11	275	67
3 rd Semester	5	28	40	18.75	15	11.67	60	14.6
5 th Semester	5	27	40	19.63	10	13	55	13.4
Financially Stable Family								
Very much Stable	Nil	--	65	18.75	Nil	--	65	15.8
Not so Much Stable	5	27	105	20.59	30	11.56	140	34.1
Unstable	35	28.57	125	19.78	45	11.18	205	50
Short-term Job Oriented Trainings by College								
Yes	25	28.00	150	20.27	50	11	225	54.8

No	15	27.00	145	19.59	25	12.20	185	45.1
Worried about Career Prospects?								
Yes, I'm worried	25	28.00	155	19.81	55	11.55	235	57.3
I'm not worried so much	15	27.00	95	19.89	10	11	120	29.3
I'm not worried	Nil	--	45	20.44	10	11.67	55	13.4

The result of our study also identifies significant positive correlation between age and the perceived mental stress level of the college going students. Correlation between age and PSS score is similar with the finding of Blanco, Salmeron, Otero, & Vazquez (2021). The mean PSS score of students of below 19 years of age, 19 to 21 years and above 21 years of age are 18.89, 19.24 and 22 respectively. This may be, because most of the final year students expressed their concern regarding job prospects and perceived high degree of mental stress. However, perceived mental stress is negatively correlated with institutional (college & faculty members) support. It has been founded, Poor relationship with professors (N=40, M=20) and wrong selection of college (N=55, M=20.67) are two major stressors among the students of first year of their college.

One side majority of college going students expressed financial instability as one of the main causes of mental stress (N=205, M=20.28), on the other side, coincidentally, exactly same number of respondents reported lower stress (N= 205, M=18.72) related to financial instability of their family. This may be due to flexible fee payment options given by some colleges to ease the student's financial burden. Study also reveals, students who have part-time job or who are financially independent shown lower perceived stress as compare to those who are financially dependent on their family. Course selection by the students was one of the another factor of stress among the college going students. It has been identified that hotel management students (B.HM) students showed comparatively higher perceived stress (M= 20.76, %= 6) than students of other courses. Among the colleges, students of Aggarwal College reported lower mean PSS score (M= 17.35, %= 40) as compare to respondents from other colleges.

Our study also identifies the role of colleges and faculty members to strengthen the mental health of the college students. Regular Counseling Session, Flexible fee payment options, Free Short-term Job Oriented Training Programs and Regular health check-up camp are some of the strategies used by colleges to strengthen mental health of their students. We identified 240 respondents (%= 58.54) reported that their regular interaction and counseling session with faculty members reduced mental stress significantly. The mean PSS score of the respondents from the colleges which provide free short-term job oriented training programs is lower (M= 17.96, N= 225, %= 54.88) than the respondents from the colleges which do not provide free short-term job oriented training programs is (M=19.19, N= 185, %= 45.12).

Conclusion

This study's finding shows that after the opening of colleges majority of the college going students are experiencing some level of perceived stress. Most of the students have experienced moderate level of perceived stress. Career prospects, financial position of the family, poor relationship with college professors and fear of third wave of pandemic are some of the major source of perceived

Analysis of Perceived Mental Stress of College Students after Opening of Educational Institutions Post COVID and Institutional Role in Strengthening Mental Health Arises: A Study of College Students and Faculty Members of Faridabad District

stress among the college students. Table: 3 shows that approx. 10% college going students (N= 40 M=31.71) experienced high perceived stress with mean PSS score of 31.71, 72% students experienced moderate perceived stress (N=295, M= 19.93) and only 18% college going students experienced low level of stress (N=75, M=11.33).students from rural area and disadvantageous background are in more sensitive to stressors (especially financial and job prospects), they have shown higher PSS score as compare to students from financially strong backgrounds and urban area.Age of the respondents, financial stressors, fear of third wave, worries about career prospects were positively correlated with level of perceived stress, whereas good relationship with faculty members, availability of regular counseling session, short-term job oriented trainings and institutional support are negatively correlated with level of perceived stress.

The conclusion of the current research is that, almost all of the students are experiencing moderate to high level of perceived stress and colleges (educational institutions)have significant role to reduce the mental stress and strengthen the mental health of the college students. Therefore, colleges should take preventive measures to avoid anxiety and depression among college students and to strengthen the mental health of the students.It is suggested that colleges should arrange counseling session, job oriented trainings, health check-up champs on frequent basis to reduce the psychological stress of their students.

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