Stress among Fresh Graduate Students during COVID 19

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Abstract:
This paper details the study of the degree of stress level among fresh graduate students (Session 2019-2020) because of COVID 19, and the differences in the perception of their stress level based on their gender. The paper also discusses the differences in the level of stress in graduates with varied employment-related status in terms of a job offer, enrollment in higher studies, self-employment, or others. Participants in the study were newly graduate students (Session 2019-2020) (60 females and 66 males) between the ages of 18-24. It was found that final year/graduating students are stressed because of Covid19 but there is no significant difference in perception of stress between male and female students i.e. both of them were found to be equally stressed during the study period. However, a significant difference is found in the level of stress based on the employment-related status of the student.
Key Words: COVID19, Stress, Gender, Fresh graduates

1.0 Introduction:

Stress is a physical and mental response to everyday demands, particularly those associated with change (Richlin-Klonsky & Hoe, 2003, p. 3). Stress can be defined as, the inability to cope with a perceived (real or imaginary) threat to one's mental, physical, emotional, and spiritual well-being which results in a series of physiological responses and adaptations (Seaward, 2002, p. 4). This threat can be either positive (eustress) such as graduation or starting a new relationship, or negative, also called distress, with examples including academic probation or not being able to pay for school. It is important to note that a certain level of stress is essential for the students in a way that it motivates students to progress in their academic journey actively, would otherwise be inactive and uninterested creatures. (Nandamuri, P. P., & Ch, G. ,2007, p.31). But stress beyond the optimum level could be detrimental to their overall well-being and affects them emotionally and psychologically. College students are exposed to a considerable amount of stress, which necessitates a successful and constantly changing coping strategy. These stressors include internal and external pressures exerted by the environment to thrive and succeed, overcome economic hardships, worries about vague futures, societal problems, and opportunities. (Pariat, L., Rynjah, A., Joplin, M., & Kharjana, M. ,2014, p. 41).

Students have fear of job opportunities and how they survive in a competitive environment (Bhargava, D., & Trivedi, H. ,2018, 108). A John Hopkins University **survey** has found a more than three-fold rise in psychological distress among adults in the US. It found adults who reported symptoms of psychological distress increased from 3.9 percent in 2018 to 13.6 percent in April 2020. Young adults are more affected due to the Covid-19 pandemic. The percentage of adults (aged 18-29 years) who reported psychological distress increased from 3.7 percent in 2018 to 24 percent in 2020. (Prabhash K Dutta, New Delhi, June 9, 2020, "How Covid-19 affected anxiety level among Indians between lockdown 1.0 and unlock 1.0?").

Nearly 85 lakh under-graduate and post-graduate students who are graduating from various universities this year would be staring at a bleak future as corporates halt hiring, especially the recruitment of greenhorns. This academic year, a 6-8 month delay is expected in on-boarding freshers, while a further lag would

compound job market woes as a similar number is expected to come out in the next year too.(Covid-19: Nearly 85 lakh fresh graduates stare at a bleak future amid pandemic, Rajesh Kurup , Mumbai Published on April 26, 2020).

2.0 Review of Literature

According to Chen (2009), stress depends on the presence of the stressors. Stressors are anything that challenges an individual's adaptability or stimulates an individual's body or mentality, Feng (1992) and Volpe (2000). Basavanthappa (2004) suggests that a stressor is an event or any stimulus that cause an individual to experience stress. Two of the most important categories of stressors that have been researched at the tertiary environment are academic and institutional stressors. As per the study conduced by Edward (2016) Undergraduate students were mostly stressed by academic-related factors and activities (stressors). Headache or backache was found to be the commonest symptom of stress amongst students. With respect to stress management techniques, it was observed that most students merely adopted emotion focused coping strategies. Chao (2012) examined the conditions (i.e., social support and dysfunctional coping) under which perceived stress predicted psychological well-being in 459 college students. Hierarchical regression analyses indicated a significant 2-way interaction (Perceived Stress × Social Support) and a significant 3-way interaction (Perceived Stress × Social Support × Dysfunctional Coping) predicting well-being. Low social support deteriorated the association between stress and well-being. Only the frequent use of dysfunctional coping exacerbated the association between stress and well-being across high and low social support. Various researchers have also talked about gender differences in perception of stress, sources of stress and coping mechanisms. Brougham, R.R., Zail, C.M., Mendoza, C.M. (2009) in their paper examined about the sources of stress and coping strategies of 166 college students. The study also talked about the relationship between sex, few sources of stress, and coping strategies. The researchers collected data using 5-factor revised COPE model. The study revealed that the college women reported a higher overall level of stress and greater use of emotion-focused coping strategies than college men. College men and women also reported different coping strategies for different stressors; however the use of emotion-focused coping strategies dominated over problem-solving strategies for both men and women.

Gao, W., Ping, S., & Liu, X. (2020) in their study 'Gender differences in depression, anxiety, and stress among college students: a longitudinal study from China' also examined the gender differences in college students' depression, anxiety, and stress over the four academic years, and to identify stressors among first year students. The study found out that anxiety was a serious issue for students. It also found out that significantly higher percentage of male students underwent depression than females, which continued during the four academic years. The study also discussed about the stressors like body image, drinking habits, and academic performance had major role in raising anxiety level of first year female students.

Anbumalar, C., Dorathy, A. P., Jaswanti, V. P., Priya, D., & Reniangelin, D. (2017) in their paper 'Gender differences in perceived stress levels and coping strategies among college students' explored gender differences in stress level and coping styles in undergraduates in Chennai. The study found out that female students reported higher level of perceived stress than their male peers. The study also found out significant differences in coping mechanisms among males and females. While females had higher feelings of anxiety and fear, males reported to higher use of anger, smoking etc. The present study is an attempt to identify differences in perception of stress based on gender and present employment status during Covid19.

3.0 Objectives: Stress is a mental state that may have a very negative outcome if not handled timely and carefully. The existing pandemic has resulted in a tremendous increase in the level of stress almost in every human being and particularly in the youth/students. The existing situation has created a situation of uncertainty concerning the future especially in terms of the unavailability of job and the nature of the job. The objectives of this research paper are:

1. To know the level of stress among the graduate students (Session 2019-2020) during the pandemic COVID 19.
2. To know the difference in the perception of stress based on gender.
3. To study the interrelationship between the level of stress and the **employment-related status*** of the student.

employment- related status refers to their likely status regarding employment viz. job offered or admission in higher courses or self-employment or any other gainful engagement

4.0 The following hypotheses have been tested in the study. To guide the thrust of the study the following hypotheses were formulated and tested at 0.05 level of significance.

- H0: There is no difference between stress level of female and male graduate students during Covid19.
- H0: There is no relation between employment related status of the graduate students and their stress level during Covid19.
- H0: There is no significant influence of interaction of gender and employment related status on stress during COVID 19.

5.0 Purpose of the study: The purpose of this research work is to contribute to knowledge and provide empirical evidence on the influence of stress level due to COVID-19 based on gender and employment-related status of graduate students.

6.0 The population of the study: The work entailed a survey of new graduate students (Session 2019-2020) of BBA/B.Com (H)/BCA from Guru Gobind Singh Indraprastha University, New Delhi, India. A total sample of 126 students was collected through a convenience sampling method out of which 52% were males and 48% were females.

7.0 Method of the study: A structured self-administered questionnaire was used to collect primary data for the study. A self-designed questionnaire was divided into three major sections. Section A covered the demographic details of the respondents. This section included general questions on the age, gender, course, type of family, number of siblings, and family income and occupation of parents. Section B covered stress and psychological well-being post-COVID 19 using Likert's scale. A series of questions on stress related to COVID 19 and respondents' apprehensions about stress because of COVID 19 such as regarding the availability of jobs, nature of the job, anxiety level, and others were asked. In the third section, students were asked to self-assess their stress on a stress scale and covered the methods adopted by the students to overcome stress.

Cronbach's alpha test was used to ascertain the reliability or internal consistency of test items. The questionnaire was administered through google forms. The questionnaire was then coded and keyed into SPSS for analysis. Two-way ANOVA was administered using SPSS to test the influence of Gender on Stress during COVID 19, the influence of employment-related status on stress during COVID 19, and the influence of the interaction of gender and employment-related status on stress during COVID 19.

8.0 Results and Discussion
I Reliability
The test items showed the Cronbach alpha coefficient of 0.77. Thus, the test items are internally consistent and reliable.
II Sample Characteristics
Normality: A Shapiro-Wilk's test (p>.05) and a visual inspection of their histograms, normal Q-Q plots, and the box plots showed that **the stress levels were approximately normally distributed for both males and females**, with Skewness of .179 (SE=.295) and Kurtosis of .045 (SE=.582) for the males and the skewness of 0.034 (SE=.309) and kurtosis of -.229 (SE=.608) for the females.

A Shapiro-Wilk's test (p>.05) and a visual inspection of their histograms, normal Q-Q plots, and the box plots showed that **the stress levels were approximately normally distributed for the present status of placement/admission/employed**, with skewness of -0.20 (SE=.441) and kurtosis of -.861 (SE=.858) for the students pursuing PG course. The skewness of -.363(SE=.434) and kurtosis of -.089(SE=.845) for the students who opted for Job. The skewness of 1.033(SE=.913) and kurtosis of 1.129 (SE=2) for the self-employed students. The skewness of .354(SE=.752) and kurtosis of -.126 (SE=1.48) for the students who were engaged in the family business and Skewness of .141(SE=.319) and kurtosis of -.178(SE=.628) for the students who were looking for a job.

Table: 1 Shapiro-Wilk Test (p>.05 significance level) in Gender wise data

	Gender	Statistic	Df	Statistic	Df	Sig.
Stress	Male	.099	66	.982	66	.470
	Female	.085	60	.986	60	.706

Table: 2 Shapiro-Wilk Test (p>.05 significance level) in Current Status wise data

	Current status	Statistic	Statistic	Df	Sig.
Stress	pursuing PG course	.171	.935	28	.082
	opted for job	.126	.974	29	.666
	self employed	.197	.943	5	.685
	engaged in family business	.215	.958	8	.790
	looking for job	.071	.986	56	.763

1. **Homogeneity of Variance:**

In gender-wise stress level data, Levene's test was administered to verify homogeneity of variance. p-value is .480 which is greater than 0.05. **Thus, the variance of the sample is homogeneous (gender-wise)**.

In present status wise data, Levene's test was administered to verify homogeneity of variance. P-value is .089 which is greater than 0.05. Thus, **the variance of the sample is homogeneous (present status wise)**.

III Analysis

Table 3: Stress level of respondents

Descriptive Statistics:

	No. of respondents	Minimum	maximum	mean	Std. deviation
Stress	126	2.00	5.00	3.4742	.60686
Valid N (listwise)	126				

Table 4: stress level in terms of gender and employability related status of the respondents

	Mean	Standard Deviation
Gender (stress)		
Male	3.43	0.64
Female	3.53	0.58
Present Status (stress)		
Pursuing PG course	3.42	0.61
Opted for Job	3.3	0.59
Self employed	3.03	0.19
Engaged in family business	3.5	0.37
Looking for job	3.6	0.63

Gender and Stress: Table 3 data demonstrates the stress level of respondents. The mean stress of the respondents is 3.47 which signifies the existence of stress among the respondents. Table 4 demonstrates the stress mean score of males and females which is 3.43 for males and 3.53 for females, which means the females are slightly more stressed than males. However, there is not much difference in the stress level of males and females and it can be said that both are equally stressed. The mean score of stress level in terms of employment-related status (table 4) reveals that whether the student has got enrolled in a PG course or has opted for a job, or is self-employed, or engaged in the family business or is looking for a job, all are in stress during the pandemic. However, the mean score of the respondents who are looking for a job is highest among all i.e. 3.6, which means that these respondents are slightly more stressed followed by those engaged in the family business with a mean score of 3.5, followed by the respondents opting for higher studies with mean of 3.42, whilst, the respondents who opted for higher studies and those who are self-employed are the two groups who have the lowest mean score of 3.3 and 3.03, but it does not mean they are not under the stress. These two categories of respondents and specifically self-employed are least affected though the difference in the mean score is not very significant.
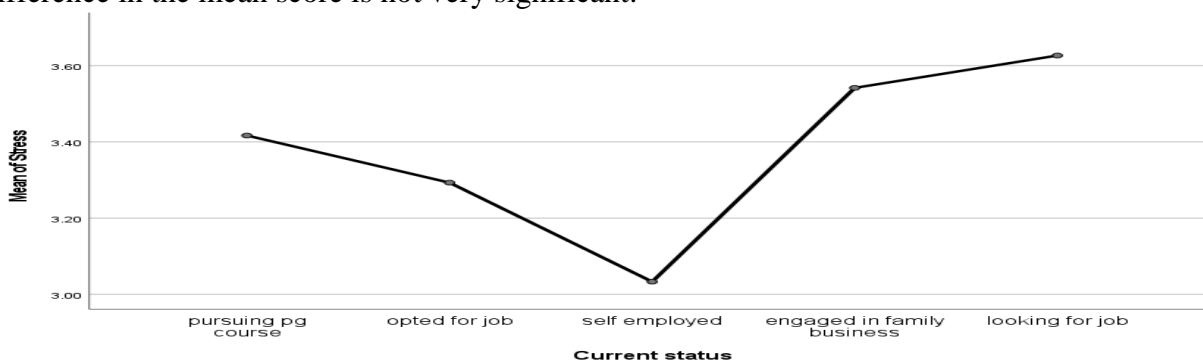

Figure: 1

Table 5: Two-way ANOVA
 Tests of Between-Subjects Effects

Tests of Between-Subjects Effects					
Dependent Variable: Stress					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	4.688[a]	9	.521	1.461	.171
Intercept	622.585	1	622.585	1746.690	.000
Gender	.599	1	.599	1.681	.197
Employability status	3.535	4	.884	2.480	.048
Gender * Employability status	.858	4	.215	.602	.662
Error	41.347	116	.356		
Total	1566.868	126			
Corrected Total	46.034	125			

Table 5 reveals that the significance value of Gender is .197 which is greater than 0.05. Thus, the level of stress between males and females is not significantly different and thus we retain the null hypothesis and it can be concluded that both male and female undergraduate students are equally stressed.

Table 5 also reveals that the significance value of the current employment-related status of job/admission in higher education is .048 which is less than 0.05. Thus, the level of stress based on employability status is significantly different, and therefore, we reject the null hypothesis and it can be concluded that the stress level changes with the change in the status.

Table 5 also reveals that the significance value of interaction between gender and employability status is .662 which is greater than 0.05. Thus, the interaction between gender and employability status does not have any significant impact on the level of stress and therefore, we retain the null hypothesis.

9.0 Findings: Findings of various other empirical studies on the impact of gender on stress remain conflicting. Several studies have concluded that there is a significant difference in the stress level of males and females whereas some studies concluded that the stress level is the same for males and females and that there is no significant difference in the stress level in terms of gender. The present study on **stress among fresh graduate students during Covid-19,** the level of stress between males and females is not significantly different which supports the conclusions drawn based on the research conducted by Watson (2002) who also found no significant difference in the perceived stress between male and female students. Similarly, Bhosale (2014); Omonyi and Ogunsanmi (2012) found no significant difference between male and female on academic stress, Rawson et al. (1994) found no difference in the reported stress or anxiety by males and females. The results reveal statistically significant differences in perceived economic stress among students of grade levels but not between genders. The research indicates that both male and female college students perceive an equivalent magnitude of economic stress and senior college students perceive the highest economic stress, Guo, Yuh-Jen (2011). However, various studies found a significant level of differences in stress levels between males and females. (Azila-G, Edem M, Eli A, 2015) concluded that the level of stress was found to be significant for all demographic variables evaluated. Misra and Castillo (2004) found that men and women differ in perception and reaction to stress. There is a significant association between gender and frustration and anxiety (Michelle, 2015).

The second significant findings in the research is that the level of stress based on employment-related status is different. During this pandemic, almost every respondent has reported being under stress irrespective of whether they are enrolled in a PG programme, or are self-employed or have been looking for a job or are engaged in the family business or have opted for a job. The major reason for the reported stress is the psychological stress during Covid-19 which has engulfed the whole world and the impact of this pandemic can be seen in almost all the sectors, businesses that resulted in a situation of stress, powerlessness, anxiety, lack of trust and confidence. However, the research does not report any significant interaction between gender and employability status. The study reveals that every respondent irrespective of gender and status are under stress during this turbulent time.

10.0 Conclusions and implications: This research indicate that most of the students (fresh graduates) have a moderate to a high level of stress. The concern for the future, nature of the job, a paradigm shift in skills, effect of Covid-19 on employability, feeling of powerlessness towards own life, anxiety, lack of control on own life, societal pressure is all contributing to an increase in the level of stress equally among male and female students. Turbulent situations like this pandemic require drastic changes throughout the system to face the long-lasting challenges. Growth rates have slipped into negative territory in most countries. Almost every sector has been hit hard and it is a matter of great concern for the young minds who are planning for their future settlements. The aim of this study is to put on records that the pandemic has resulted in increasing the level of stress. The young generation is the future of our country and therefore, it is important for the teaching community and government to discuss at an open platform about the opportunities that could be explored by the students so that their concern for the future which is a major stressor can be released. Systematic career counselling and skill updates must also be a part of regular programmes in colleges.

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