

LEVELS OF STRESS IN INDIAN COLLEGE STUDENTS

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ABSTRACT

Stress has become one of the most pervasive issues in issue in present time. Stress is any type of reaction that requires attention and action. In today's world stress can arise from various environmental and academic aspects and is very common in college going students. Uncontrolled stressors can lead to decrease in performance, social, psychological, physical adjustments. Descriptive research was conducted to determine the level of stress experienced by female Indian college students (N=52) residing in Delhi/NCR region, of ages 18-20 years (Mean=19.14 years), and additionally the relation between age and stress levels was investigated. The data was collected using an adapted version of College Students' Stress Questionnaire (Yikealo, et al., 2018). The results showed that the students experienced higher levels of academic stress, and comparatively lower levels of social and psychological stress. It was also found that there were no significant differences in stress levels with reference to age. In conclusion, college students were overall found to face moderate levels of stress, and there is no significant relation between age and stress. Future directions are discussed.

Introduction

Our bodies had evolved to deal with high levels of stress on a momentary basis in extreme life or death situations (Fredrickson, 2001), but today, we're faced with the exact opposite of what our bodies had evolved to combat effectively; low levels of chronic stress. This singular occurrence is the cause or at least the causal factor of multiple long-term afflictions, be it conditions of the body; cardiovascular disease (Jood, et al., 2009; Kivimäki, & Kawachi, 2015), obesity (de Luca & Olefsky, 2006), diabetes (Lloyd, et al., 2005), immune disease (Kemeny & Schedlowski, 2007), or of the mind; burnout (Lloyd, King, & Chenoweth, 2002; Maslach, et al., 2018), anxiety (Kleppa, et al., 2008), traumatic stress (Galek, et al., 2011) and depression (Nielsen, et al., 2008; Steinhart, et al., 2011; Koutsimani et al., 2019).

In a world that was already plagued with chronic stress, the added stress caused by the 2019 outbreak of the COVID-19 causing SARS-CoV-2 virus has sent many over the edge (Kleppa et al., 2008; Markou & Cryan, 2012; Melchior et al., 2007; Misra & McKean, 2000). The reported cases of mental health problems such as depression and anxiety have skyrocketed. Such conditions are not only debilitating for the person who is going through it, but also for the individuals in close contact with the individual who is suffering (Insel & Roth, 2012).

Adding on to the problem, the number of mental healthcare professionals in India is far below the recommended amount, and in most cases, it is found that the number of people who suffer from mental health problems is far higher than the number of people actually infected (Reardon, 2015). Evidence of past disease outbreaks suggest that the psychosocial impact of a disease is far greater than that of the disease itself (Shigemura, et al., 2020).

In such a situation, it becomes difficult for both, the ones in need of the service, and the ones providing it, to cope with their situations, warranting the need for effective ways to deal with the stresses of the times.

Stress can be defined as an internal state which can be caused by physical demands on the body (disease condition, exercise, extremes of temperature) or by environment and social situation which are evaluated as potentially harmful, uncontrollable or exceeding our resources for coping. (Clifford and Richard, 2020).

According to D'Zurilla & Shetty (1991), college students are prone to stress because of their transitional nature of adjustment to the rudiments of higher education programs. This means that a sudden change of a secondary school environment that lacks the use of modern technology to the highly cognition level of learning resulted in stressful situations. As a result, they hardly comprehend new lessons in the classroom and experience cultural differences (Aquino, 1998).

There are common stressors in college life that include greater academic demands, being on one's own in a new environment, financial responsibilities, awareness of one's sexual identity and orientation, exposure to new people and making decisions on a higher level (National Health Ministries, 2006). Earning high grades is a source of stress that affects them to succeed in making good impressions on their parents, classmates and significant others. Failures become pressures that come from intrapersonal, interpersonal, academic and environmental stressors (Lucier, 2012). Internal and external stressors are agents that cause stress (Chadha, 2006).

College students look at these stressors to affect them when they fail from their academic activities knowing this as the major reason for their parents' approval (Edlin & Golanty, 2007). They look into these pressures as the primary concern for acceptance and honor (Reifman, 2011).

Review of Literature

Gao, W., Ping, S., & Liu, X. (2020) conducted a longitudinal study in order to examine the gender differences in levels of college students' depression, anxiety, and stress over the four academic years, and to explore possible anxiety-related factors among first year students. For this study, a sample of 1892 undergraduate students from 15 universities in China, with 898 females and 994 males were analyzed. The participants completed a survey containing the Depression Anxiety Stress Scale-21 questionnaire, students' socio-demographic information, and their educational background, etc. It was found that on average, both female and male college students suffered from mild anxiety in the first three years. Female students scored significantly higher in anxiety than males in the first and second years, and there was no significant gender difference in students' average depression and stress levels. A significantly larger proportion of female students experienced anxiety above the normal threshold, whereas a higher percentage of male students endured different degrees of depression; no significant gender differences were found in stress problems. Anxiety had a significant positive correlation with intro version. Female freshmen's anxiety levels were also associated with their body image, drinking habits, and academic performance. In conclusion, anxiety turned out to be the most prevalent and serious issue for college students, especially for female students; while a growing prevalence of depression was found among male students during college.

Karatekin, C. (2018) conducted a short-term longitudinal study to examine whether Adverse Childhood Experiences (ACEs) could be used to identify college students at risk for mental health problems and whether current level of stress mediates the relationship between ACEs and mental health. The sample consisted of $n = 239$ college students. Data on ACEs and mental health (depression, anxiety and suicidality) were collected at the beginning of the semester, and data on current stressors and mental health were collected toward the end of the semester. The Findings indicate that ACEs predicted worsening of mental health over the course of a semester and suggested current number of stressors as a mediator of the relationship between ACEs and mental health. The results of the study suggest that screening for ACEs might be useful to identify students at high risk for deterioration in mental health. Results further suggest that stress-related interventions would be beneficial for students with high levels of ACEs and point to the need for more research and strategies to increase help-seeking in college students.

Amaral, A. P., Soares, M. J., Pinto, A. M., Pereira, A. T., Madeira, N., Bos, S. C., ... & Macedo, A. (2018) conducted a study to investigate the role of Repetitive Negative Thinking(RNT), cognitive emotion regulation, and negative affect as mediators of the relationship between stress and sleep difficulties, the associations between all these variables and the gender differences were analyzed. A sample of 549 college students completed self-report measures.

Descriptive and correlational analyses showed significant differences between genders. In total sample, sleep difficulties were positively associated with perceived stress, negative affect, RNT and cognitive emotional strategies (rumination, self-blaming, catastrophizing, and acceptance). Mediation analyses suggested that in addition to the direct effect of stress on sleep difficulties, rumination and negative affect were important mediators in this relationship (after controlling gender). RNT was significantly associated to rumination and/or negative affect. The findings suggest that the effect of stress on sleep difficulties is strengthened by rumination and/or negative affect. The negative impact of RNT (content free) only occurs if associated to rumination and/or negative affect.

Yikealo, D., Tareke, W., & Karvinen, I. (2018) investigated the level of stress among the College of Education (CoE) students in Eritrea Institute of Technology by undertaking descriptive research to assess the students' level of stress. A randomly drawn participants (N =123) completed a self-developed questionnaire assessing their levels of stress on five domains: physiological, social, psychological, academic, and environmental. The results revealed that there was a moderate level of stress among the students of both genders; no significant sex differences in stress levels were observed. Out of the five domains, academic and environmental stressors were found contributing most to the students' level of stress. Besides, the students' levels of stress were found to have no statistically significant associations with their gender and grade point average. In conclusion, the academic and environmental are the most likely to contribute to college students' stresses regardless of gender and grade point averages.

Coiro, M. J., Bettis, A. H., & Compas, B. E. (2017) examined associations between interpersonal stress, coping strategies, and symptoms using a control-based model of coping, since, the way college students cope with stress, particularly interpersonal stress, may be a critical factor in determining which students are at risk for impairing mental health disorders. The sample consisted of 135 undergraduate students from two universities. Interpersonal stress, coping strategies, depression, anxiety, and somatization were assessed via self-report. The results showed that students reporting more interpersonal stress reported more depression, anxiety, and somatization, and reported less use of engagement coping strategies and greater use of disengagement coping strategies. Engagement coping strategies accounted for a significant portion of the association between interpersonal stress and mental health symptoms.

Counterintuitively, it was also found that, coping strategies did not moderate the association between stress and mental health symptoms. It was concluded that interventions designed to improving students' coping strategies may be an effective way to reduce mental health problems on college campuses.

Research Questions

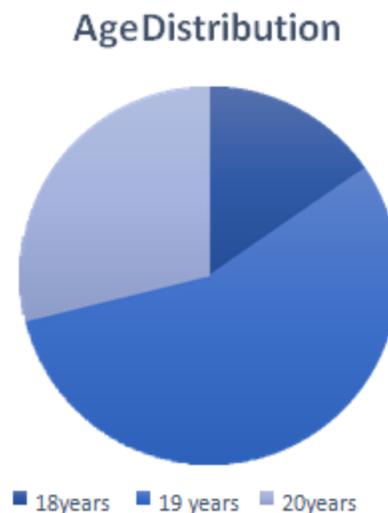
What is the extent of

- (i) Academic stress
- (ii) Social stress
- (iii) Psychological stress
- (iv) The overall level of stress of the college students?

Sample & Methodology

Sample

The present study was descriptive research in which quantitative data were collected using a survey method. A total of (N=52) female, undergraduate students from Delhi/NCR region participated. The ages of the participants varied from 18 to 20 years (Mean=19.14years); 18years old (n=8; 15.4%), 19years old (n=29; 55.8%), 20yearsold (n=15;28.8%).



Measure

For the Demographic information, questions related to age and gender were asked in the survey. To measure stress, an adapted version of College Students' Stress questionnaire (Yikealo, et al.,2018) which comprises five subscales (i.e., academic, physiological, social, psychological and environmental) was used. The measure contains a total of 50 items rated on four points ranging

from 1 (never) to 4 (always). Each subscale contains ten items. Higher scores reflected a higher level of stress. The internal consistencies for the subscales were satisfactory and ranged from 0.60 to 0.80. Similarly, the overall measure showed high reliability coefficient($\alpha=.87$).

For the purpose of the study, three subscales from the College Students' Stress Questionnaire were used: academic, social, and psychological stress or subscales.

Procedure

In the procedure of data collection, online survey forms were distributed to students in through online groups. As the level of education was considered to be of the fluency to understand the English language of the items of the questionnaire, there was no translation required.

Data Analysis Procedure

The data was computed to produce descriptive stats such as frequency distributions, mean, and standard deviations, which were used to summarize and analyze the data.

Results

Academic Stress

Levels of academic stress

Table 1: Levels of Academic Stress (Frequency Distribution)

Level of Academic Stress	Frequency	Percentage	Cumulative Percentage
Lower	5	9.6	9.6
Moderate	35	67.3	76.9
Higher	12	23.1	100.0
Total	52	100.0	100.0

To determine the level of Academic Stress, descriptive stats were employed, and it can be seen from **Table 1**, most students (n=35; 67.3%) reported a moderate level of stress, (n=12; 23.1%) reported high level of stress, and (n=5; 9.6%)reported low levels of stress.

Table 2: Summary of Academic Stressors (Frequency Distribution)

Academic Stressors	Never	Rarely	Sometimes	Frequently
	%	%	%	%
Unfair grading system in college	9.6	28.8	44.2	17.3
Pressure in daily studying	7.7	21.2	50	21.2

Difficult to deal with academic problems	1.9	32.7	38.5	26.9
Depression due to low CGPA	40.4	21.2	26.9	11.5
Difficulty in studying for long hours	7.7	21.2	30.8	40.4
Too much academic workload	9.6	11.5	51.9	26.9
Inadequate educational facilities	30.8	32.7	21.2	15.4
Dissatisfaction with one’s program	32.7	38.5	23.1	5.8
Instructors’ poor subject matter mastery& pedagogical competence	19.2	36.5	30.8	13.5
Boringness in attending classes regularly	13.5	9.6	40.4	36.5

Table 2 presents the frequency distribution of the specific factors which produce academic stress. All the specific factors contribute to academic stress, however, “Difficulty in studying for long hours” (item five), and“ Boringness in attending classes regularly”(item ten), were reported to be experienced more frequently than other items. Participants also point out that “Unfair grading system in college” (item 1), “Pressure in daily studying” (item 2), “Difficult to deal with academic problems” (item 3), “Too much academic workload” (item 6), also contributed significantly to academic stress.

Social Stress

Table 3: Levels of Social Stress (Frequency Distribution)

Level of Social Stress	Frequency	Percentage	Cumulative Percentage
Lower	18	34.6	34.6
Moderate	30	57.7	92.3
Higher	4	7.7	100.0
Total	52	100.0	100.0

To determine the level of Social Stress, descriptive stats were employed, and it can be seen from **Table 3**, most students (n=30; 57.7%) reported a moderate level of stress, (n=4; 7.7%) reported high level of stress, and(n=18;34.6%) reported low levels of stress.

Table 4: Summary of Social Stressors (Frequency Distribution)

Social Stressors	Never %	Rarely %	Sometimes %	Frequently %
Lack of good relationship with family	32.7	32.7	26.9	7.7
Unable to enjoy meeting people	21.2	30.8	28.8	19.2
Lack of good relationships with others	30.8	38.5	23.1	7.7
Conflict with others	28.8	48.1	15.4	7.7
Preferring to be alone	9.6	28.8	40.4	21.2

Insisting others on my opinion	21.2	38.5	38.5	1.9
Difficulty in dealing with others	26.9	28.8	34.6	9.6
Dealing with others nervously when they try to provoke me	17.3	50	26.9	5.8
Poor conflict resolution skill	19.2	48.1	25	7.7
Getting into conflict with teachers	71.2	21.2	5.8	1.9

Table 4 presents the frequency distribution of the specific factors which produce social stress. All the specific factors contribute to social stress, however, “Unable to enjoy meeting people” (item two), and “Preferring to be alone” (item five), were reported to be experienced more frequently than other items. Participants also point out that “Insisting others on my opinion”(item six), “Getting into conflict with teachers” (item ten), did not contribute significantly to social stress.

Psychological Stress

Table 5: Levels of Psychological Stress (Frequency Distribution)

Level of Social Stress	Frequency	Percentage	Cumulative Percentage
Lower	12	23.1	23.1
Moderate	30	57.7	80.8
Higher	10	19.2	100.0
Total	52	100.0	100.0

To determine the level of Psychological Stress, descriptive stats were employed, and it can be seen from **Table 5**, most students (n=30; 57.7%) reported a moderate level of stress, (n=10;19.2%) reported high level of stress, and (n=12;23.1%) reported low levels of stress.

Table 6: Summary of Psychological Stressors (Frequency Distribution)

Psychological Stressors	Never %	Rarely %	Sometimes %	Frequently %
Feeling of inferiority	28.8	30.8	25	15.4
Everything done is an effort	11.5	26.9	36.5	25
Lack of clear vision	25	30.8	32.7	11.5
Feeling of incompetence	19.2	38.5	36.5	5.8
Low self-esteem and self-concept	23.1	32.7	25	19.2
Poor memory power and concentration	15.4	40.4	25	19.2
Pessimistic or negative thoughts.	15.4	38.5	23.1	23.1
Lack of motivation	9.6	30.8	28.8	30.8
Dissatisfaction with college	17.3	40.4	23.1	19.2

Irrational thinking	19.2	38.5	25	17.3
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Table 6 presents the frequency distribution of the specific factors which produce psychological stress. All the specific factors contribute to psychological stress, however, “Lack of motivation” (item eight), “Everything done is an effort” (item two), and “Pessimistic or negative thoughts” (item seven), were reported to be experienced more frequently than other items. Participants also point out that “Feeling of incompetence” (item four), did not contribute significantly to psychological stress.

Overall Stress

Level of Social Stress	Frequency	Percentage	Cumulative Percentage
Lower	11	21.2	21.2
Moderate	34	65.4	86.6
Higher	7	13.4	100.0
Total	52	100.0	100.0

To determine the level of Overall Stress, descriptive stats were employed, and it can be seen from **Table 7**, most students (n=11; 21.2%) reported a moderate level of stress, (n=34; 65.4%) reported high level of stress, and (n=7;13.4%)reported low levels of stress.

Comparison between Stress and Age

Age (in years)	Frequency	Percentage	Academic Stress (Total)
18years	Lower	2	Moderate
	Moderate	5	
	Higher	1	
	Total	8	
19years	Lower	7	Moderate
	Moderate	19	
	Higher	3	
	Total	29	
20years	Lower	2	Moderate
	Moderate	10	
	Higher	3	
	Total	15	

The results from **Table 8**, show that there are no significant differences in stress levels among 18- to 20-year-old students, however, a trend of increasing individuals facing moderate levels of stress can be observed from 18 years of age (62.5%) – 19 years (65.6%) – 20 years (66.7%). Out of the three ages considered, the highest level of stress was among 20-year-old students (20.0%).

Discussion

This research aimed to examine the levels of academic, social, and psychological stress faced by female Indian college students in the Delhi/NCR region. Apart from this, the study also explored possible relations between age and stress levels. The results showed that students face high levels of academic stress, and comparatively lower levels of social, and psychological stress. The study also showed that there were no significant associations between students' age and stress levels.

With reference to academic stress component, it was found that most participants have moderate academic stress (67.3%), while a considerable portion had high academic stress (23.1%). "Difficulty in studying for long hours", and "Boringness in attending classes regularly" were found to be the most stress-inducing factors.

Most participants experienced moderate levels of social stress (57.7%), wherein a significant amount of the sample population had low social stress levels (34.6%). It was reported that "Unable to enjoy meeting people", and "Preferring to be alone", were the most stress inducing while "Insisting others on my opinion", "Getting into conflict with teachers", did not cause distress.

As far as the psychological stress domain is concerned, most participants had moderate levels of stress (57.7%), however, the sample showed similar levels of low and high stress levels; lower (23.1%), and higher (19.2%). It was reported that "Lack of motivation", "Everything done is an effort", and "Pessimistic or negative thoughts" were the most significant contributors to psychological distress; this finding is corroborated by the work of Amaral, et al.,(2018).

Overall, it was observed that college students have a moderate level of stress, which is confirmed by findings of Yikealo, et al., (2018).

Conclusion

This research indicates that majority of female college students in Delhi/NCR region have moderate levels of stress. It was found that academic component of stress is higher among these students, wherein long hours of study, repetitive nature of classes, unfair grading system, daily studying, and academic problems were among the factors that inflict academic stress.

Conversely, students reported low levels of social and psychological stress. In addition, it was found that there is no significant relation between age and level of stress experienced by individuals.

Limitations and Future Research Recommendations

The present research employed a self-report survey method to collect information, which is known to be unreliable by virtue of an individual's interpretation of the items, as well as due to social desirability while answering, which raises questions to the truthfulness of the response. Future studies might adopt mixed research approaches to maintain accuracy and validity of the data gathered.

The sample size of the research was also rather small; thus, findings may not be generalizable to other populations. Thus, future research may employ a larger scale sample in order to enhance the external validity of the findings of this study.

In addition, this research did not explore the causal relationship between the variables under study, but rather conducted a quantitative data analysis, upcoming researches may explore the relationship between these variables and establish a causal relationship (if any).

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