

Gender Differences in Perceived Stress levels and Coping Strategies among College Students

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ABSTRACT

The title of the study is Gender Difference in the perceived level of stress and coping strategies among college students. It establishes the context and the significance of the research being conducted by summarizing current understanding and background information about the topic, stating the purpose of the work in the form of research problem supported by hypothesis or a set of questions, briefly explaining the methodological approach used to examine the research problem highlighting the potential outcomes the study can reveal.

Keywords: *Gender Differences, Perceived Stress levels, Coping Strategies, College Students*

Stress is a natural physiological mechanism that protects humans from danger. When stress occurs, the human body prepares for quick action by releasing hormones that increase alertness and focus. However, if the source of stress does not disappear, stress hormones can persist in the body. Continual exposure to stress hormones has been linked to a wide range of physical and psychological illnesses, such as obesity, gastrointestinal disorders, cardiovascular disorders, skin disorders, anxiety attacks, and depression.

Recent studies have begun to recognise the importance of gender's influence on stress and have consistently revealed that women report higher levels of chronic and daily stressors than men (Hogan, Carlson, & Dua, 2002; Ptacek, Smith, & Zanas, 1992; Tamres, Janicki & Helgeson, 2002). The transition of students from high school to university or college is a major experience in their lives. It accords them many opportunities of psychological development and learning experiences. However, this transition also causes a number of stressful circumstances in their lives. Growing evidence suggests that women and men are stressed by different types of situations. Men were more likely to list finances and work-related events as sources of their stress (stressors), whereas women were more likely to list

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family and health-related events. However, studies have found out that college students experience stress related to financial problems, Examination pressure, rejection, dissolutions of relationships, depression, and feelings of low self-esteem.

The first thing to do to prevent psychological distress and development of serious illness is to cope with stress effectively. Talking with friends and family, exercising, praying, or actively addressing the causes of stress have been identified as adaptive coping strategies that may enhance overall well-being. On the other hand, maladaptive and avoidance strategies, such as drinking or denying the existence of the stressful situation, have been found to be associated with depression. Significant gender differences have been found for stress coping strategies (Matheny, Ashby & Cupp. 2005). Sitz and Poche (2006) found out that women displayed more optimism than men and have lower levels of perceived stress compared to men. A study found that women tended to use social support and help-seeking behaviour to cope with stress, which may be protective factors against depression and anxiety disorders. Whereas, men were more likely to use maladaptive coping strategies, such as consuming alcohol and following unhealthy eating habits. However, studies by Donaldson, Prinstein, Danorsky and spirits (2000) revealed that there were no gender differences in coping with stress. Tholts (1995) reported that although gender is thought to have an effect on the relationship between stress and the type of coping skill was chosen, these results are not always consistent.

Whereas, only a few studies indicate that universities and colleges students face high levels of pressure and stress. Moreover, a littlere search, particularly in the developing countries, have sought to find out between female and male students, which gender is most affected by stress, and the coping strategy adopted by male and female students.

This study was designed to explore gender differences in stress levels and coping style in undergraduates, who, as a group, are acknowledged to experience high degrees and frequencies of stress. Based on this study, interventions can be developed to help people better cope with stress. Interventions for women may focus on increasing the use of adaptive strategies such as praying and talking to friends and family, while interventions for men may introduce the use of adaptive coping strategies such as exercise and actively fighting causes of stress. More research into specific stressors and coping strategies may help tailor interventions that are more effective and comprehensive. However, it is important to identify how gender is related to stress in order to target prevention and treatment strategies for both males and females most effectively.

Problem and Hypotheses

The problem question that led to the study was:

Is there any gender difference in perceived stress level and coping strategies among college students?

Hypotheses

1. There is no significant relationship between perceived stress level and coping strategies.

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2. There is no significant gender difference in perceived stress level among college students.
3. There is no significant gender difference in coping strategies among college students.

REVIEW OF LITERATURE

A literature review is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as a theoretical and methodological contribution to a particular topic. Literature reviews are secondary sources and do not report new or original experimental work

Chambres (2014), compared the coping and perceived stress among students by first generation and continuing generation status, race or ethnicity and gender. This study assessed how different population cope with stress and how diverse student population perceive their general level of stress and how they coped with stress. Participants were from six racial or ethnic groups which included 1,085 UG psychology students from two Southeast Universities. From this research, it was found to have the most significant relationship with both coping and perceived stress was Gender.

Hamaideh examined about Gender difference in stressors and reactions to stressors among Jordanian University students. The aims of this study were to examine the difference in perception of stressors and reaction to stressors between Male & Female students, to identify the best predictors of stressors among them. The student Life Stress Inventory was used to measure stressors and reaction to stressors of 465 Males and 485 Females students recruited through stratified random sampling. The result confirmed the findings of previous studies.

M. Anitei, M. Chraif. A Correlative study between stressors and positive and negative emotions at young Romanian Universities (2013). This study highlights the possible correlation between Perceived stressors in an academic environment and UG students in positive and negative emotions. Participants were 125 undergraduate students aged between 19 & 23 years old, 17 males & 108 females. Results highlighted the statistically significant positive correlation between communication with colleagues and professors and positive emotions & statistically significant negative correlation between communication with colleagues and professors and negative emotions.

Elvin Gabriel, Jemmy Kijai (2016), Perceived stress was measured with Perceived stress scale to student satisfaction was measured by single, straightforward question. Multiple regression analysis was conducted to analyse the correlation between perceived stress, self-efficacy satisfaction with the dissertation process. Descriptive statistics and multiple regression analysis indicated that both perceived stress and self-efficacy are positively and significantly correlated with satisfaction.

Matud (2004) examined Gender difference in stress and coping in a sample of 2,816 People (1,566 Women and 1,250 Men) between 18 to 65 years old with different socio-demographic

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characteristics. The results of MANCOVA after adjusting for socio-demographic variables indicated that women scored significantly higher than the men in chronic stress and minor daily stressors. Furthermore, gender differences in 14 of the 31 items listed, with the women listing family and health related events more frequently than the men, whereas the men listed relationship, finance and work related events. The results of their studies suggest that women suffer more stress than men and their coping style is more emotion-focused than that of men.

Schmaus (2008) examined gender differences in response to initial and repeated exposure to a laboratory stressor as well as potential mechanisms for these differences. Participants viewed a Holocaust video two occasions with a 2-day interval between sessions. The findings indicated that women may be more vulnerable to repeated stress exposures compared to men suggesting sensitization.

Stroud (2002) studied about sex difference in stress responses: social rejection versus achievement stress. In this experiment, 24 men and 26 women, Mean age 19.6, SD=1.13 were randomly assigned to achievement or rejection stress conditions. There was no sex difference in mood ratings following the stressors. Women appear more physiologically reactive to social rejection challenges, but men react more to achievement challenges.

Houtman (1990) examined about the interrelation between Neuroticisms, Anxiety, Extroversion, physical fitness and other coping styles like palliative responding, avoidance behaviour, seeking social support, expressing emotions and having comforting cognitions. In this study, 77 subjects participated which includes 40 men and 37 women. Significant sex differences were found in the correlation between Type A behaviour and the coping styles and between neuroticism, extroversion, Anxiety, Type A behaviour and the coping styles.

RESEARCH METHODOLOGY

Objective

This study was conducted in various co-education colleges. The survey is used to find out the perceived stress levels among male and female students and differences in their coping strategies.

Variables

Gender is an independent variable. Perceived stress levels and coping strategies are dependent variables. Independent variable is the variable that is manipulated or controlled by the researcher. It is assumed to have a direct effect on the dependent variable. The dependent variable is the one that is observed for changes in order to assess the effect of the treatment. Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period. Perceived stress incorporates feelings about the uncontrollability and unpredictability of one's life, how often one has to deal with irritating hassles, how much change is occurring in one's life and confidence in one's ability to deal with problems or difficulties. It is not measuring the types or frequencies of stressful events which have happened to a person, but rather how an individual feels about

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the general stressfulness of their life and their ability to handle such stress. Coping means to invest own conscious effort, to solve personal and interpersonal problems, in order to try to master, minimise or tolerate stress and conflict. Gender refers to the attitudes, feelings and behaviours that a given culture associates with a person's biological sex.

Research Design

The study was an Ex Post Facto design, which is a quasi-experimental study examining how an independent variable, present prior to the study in the participants, affects a dependent variable. A quasi-experimental study simply means participants are not randomly assigned.

Sample

- 1. Description of sample:** The research population constituted college students of age group between 18-22 from different colleges. Stratified and simple random sampling technique were used to select a sample which comprised of 80 respondents (40 males and 40 females).
- 2. Sample selection:** Convenience sampling was used. Convenience sampling is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the study. In this, the first available primary data source is used for the research without additional requirements that is this sampling method involves getting participants wherever one can find them and typically wherever is convenient.

a. Inclusion Criteria

1. Students between the ages of 18-22
2. Undergraduate students from colleges
3. Students from all Socio-Economic status
4. Students who are unmarried
5. Students from all localities across Chennai

b. Exclusion Criteria:

1. Students who are physically-challenged
2. Postgraduate and Doctorate students
3. Transgender students
4. Students who learn via correspondence

Operational Definition

Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period.

Coping means to invest own conscious effort, to solve personal and interpersonal problems, in order to try to master, minimise or tolerate stress and conflict.

Tools Used

The personal data sheet was formulated by the researchers. The personal data sheets with demographic details are attached in appendix A.

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Instruments and Procedures

Two research instruments were used in data collection, a biographical and a perceived stress scale adopted from the biographical form contained item which generated data on the gender and mode of study. The perceived stress questionnaire contained 10 items which measured the stress levels in respondents on a 5-point scale. The two research instruments were administered to the participants by the researcher. Permission to collect data was obtained from course lecturers and the participants.

a) Administration

The questionnaire was administered to the participants and they were told about the research. With their informed consent and the following instruction is clearly given they filled the personal data sheet and the questions. The instructions given in tool were: the following questions are concerned with the past four weeks (28 days) only. Please read each question carefully. Please answer all the questions.

b) Procedure

Questionnaires were handed over to the subjects personally and responses were collected within 5 minutes. They were given one to one during college time and also while travelling. A few were handed over as a group and collected by the team.

Scoring

For PSS

Scoring:	Never	Almost Never	Sometimes	Fairly Often	Very Often
Questions 1, 2, 3, 6, 9 & 10	0	1	2	3	4
Questions 4, 5, 7 & 8	4	3	2	1	0

The total score is calculated by finding the sum of 10 items, reverse coding questions 4, 5, 7, & 8 – as pictured above. The PSS has a range of scores between 0 and 40. A higher score indicates more stress.

For CS

Please note that the scoring legend has been derived rationally, not empirically. Nevertheless, you might find it interesting to compute your score for each other scale below using the following legend: a = 4; b=3; c=2; d=1.

Wellness Scale (sum of scores for questions 1-7 divided by 7)

Thought Control Scale (sum of scores for questions 8-13 divided by 6)

Active Coping Scale (sum of scores for questions 14-20 divided by 7)

Social Ease Scale (sum of scores for questions 21-26 divided by 6)

Tension Reduction Scale (sum of scores for questions 27-28 divided by 2)

Spiritual Practice Scale (sum of scores for questions 29-32 divided by 4)

Overall Score (sum of the scale scores above divided by 6)

Interpreting your score: A perfect score on each scale would be 4. with this in mind we might construct the following interpretive key:

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An overall score of 3.5+ suggests you may be a superior stress copers, 2.5 -3.4 suggests you may be an above average stress copers , 1.5 -2.4 suggests you may be an average stress copers, less than 1.5 suggests you may be a below average stress copers

a) Reliability:

Cohen, Kamarck, & Mermelstein (1983) reported Cronbach's between .84-.86 for the PSS. Test-retest reliability for the PSS was .85.

b) Validity:

Correlation of the PSS to other measures of similar symptoms ranges between .52-.76 (Cohen et al., 1983).

Data Analyses

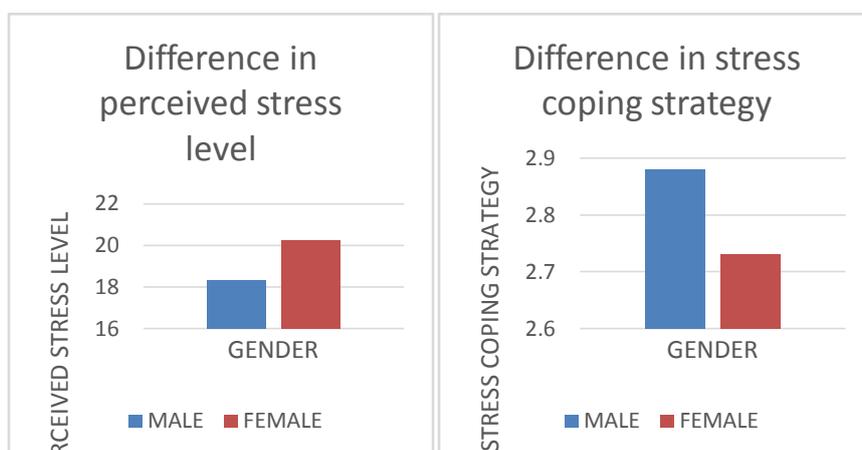
The completed instruments were coded and the responses scored and keyed into an Excel statistical spreadsheet. Both descriptive and inferential statistics were used in data analyses. The descriptive statistics used in the study were mean scores and standard deviation. While the inferential statistics used was an independent t-test also called the two-sample t-test or student's t-test and it determines whether there is a statistically significant difference between the means in two unrelated groups of independent samples. The alpha level was set at 0.05.

Ethical Consideration

The researchers explained the reason of the study to the participants. The researcher requested them to read and sign the informed consent letter. Participants were also assured of the anonymity and confidentiality of their responses and they were not required to write their names on the research instrument used to collect data.

RESULTS AND DISCUSSION

The first objective of this study was to investigate whether there is a significant relationship between perceived stress level and coping strategy. The correlation for the data revealed a significant relationship between perceived stress level and coping strategy, $r = -0.3986$, $n=80$, $p<0.01$, two tails.



The second objective of the study was to find the influence of gender on perceived stress level among students in colleges. To achieve this objective, the following research question

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was raised. Do male and female students in colleges differ in their level of stress? To answer this question the participants were asked to indicate their gender on the biographical form and respond to the items in questionnaire measuring their stress level. Their responses were calculated and reported in Table 1.

Table 1: Gender and Perceived Stress Level

Groups	Sample Size	Mean	Standard Deviation	t-Statistic	Significance
Males (n=40)	N=80	18.3	5.23	-1.69	Not significant
Females (n=40)		20.2	4.79		

$\alpha = 0.05$

Table 1 shows that females show higher rates on perceived stress level than males among college students. The mean scores of male and female participants were compared using a t-test for independent samples. More specifically, female students scored higher (M=20.2, SD=4.79) than males (M=18.3, SD=5.23). But the sample data do not provide sufficient evidence to show a significant difference in perceived stress level among college students. (df=78, t= 1.69).

The third research objective was to investigate gender differences in stress coping strategies among students in colleges. To achieve this objective the following research question was posed: Are there gender differences in stress coping strategies between male and female students in colleges? To answer this question, the participants were asked to respond to the items in a questionnaire measuring their stress coping strategies. Their responses were scored, and mean scores calculated and reported in Table 2.

Table 2a: Gender and stress coping strategies

Scale	Gender	N	Mean	Standard Deviation
Wellness scale	Male	40	3.040	0.478
	Female	40	2.950	0.320
Thought control scale	Male	40	2.970	0.509
	Female	40	2.600	0.478
Active coping scale	Male	40	2.760	0.338
	Female	40	2.710	0.396
Social ease scale	Male	40	2.920	0.401
	Female	40	2.810	0.422
Tension reduction scale	Male	40	2.830	0.728
	Female	40	2.420	0.780
Spiritual practice scale	Male	40	2.830	0.633
	Female	40	2.980	0.504

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Table 2b: Gender and Stress Coping Strategies

Groups	Sample Size	Mean	Standard Deviation	t-statistics	Significant
Males=40	N=80	2.88	0.337	2.156	P<.05
Females=40		2.73	0.290		

$\alpha = 0.05$

Table 2a. reveals gender differences in the various stress coping strategies, $t(78) = 2.156$, $p < 0.05$. The findings showed a difference between wellness coping strategy mean scores of males and females. More specifically, male students scored higher ($M=3.04$, $SD=0.478$) than females ($M=2.95$, $SD=0.320$). Likewise, the results showed a significant difference in Thought control strategy mean scores of males and females. With male student scoring higher mean scores ($M=2.970$, $SD=0.509$) than female students ($M=2.60$, $SD=0.478$).

This study also revealed a difference between active coping strategy mean scores of males and females. Male students who used active coping as a strategy for reducing stress had a higher mean score ($M=2.760$, $SD=0.338$) than female students ($M=2.710$, $SD=0.396$).

The findings of this study showed that male students had higher mean scores on social ease coping strategy mean scores ($M=2.920$, $SD=0.401$), female students mean scores ($M=2.810$, $SD=0.422$), Male students who used tension reduction as a strategy for reducing stress had a higher mean score ($M=2.830$, $SD=0.728$) than female mean scores ($M=2.420$, $SD=0.780$) and the results showed that there is a significant difference in the tension reduction strategy. Whereas female students scored higher mean scores on spiritual practice female mean scores ($M=2.980$, $SD=0.504$), male mean scores ($M=2.830$, $SD=0.633$). There was a significant difference in stress coping strategy among male and female college students.

DISCUSSION

The purpose of the study was to investigate whether there is a relationship between perceived stress level and coping strategy and also gender differences in the perceived levels of stress and Stress coping strategies among college students in Chennai. Results showed a significant relationship between perceived stress level and coping strategy. And also, female students reported higher levels of perceived stress than their male peers. These findings are consistent with previous studies which revealed that women report higher levels of stress than men (Hogan, Carlson & Dua, 2002; Ptacek, smith & Zanas, 1992; Tamres2002). Ng and Jeffrey (2003) who reported that females are more likely to be stressed than men. Jajularipin, Visata and Salfuddin (2009) also reported a significant difference in the level of stress attributed to gender. The argument advanced by Nolen-Hoeksema (1990) that women face a number of burdens in everyday life as a result of social status and roles relative to men and these strains contribute to higher stress perhaps could explain the finding of this study.

Findings regarding gender and stress coping strategies revealed that male participants significantly differed from those of female. Specifically, in the current study, females reported higher feelings of anxiety, fear, crying, depression and blaming self as reactions to

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stressors than males, while males reported higher use of anger, smoking and thinking more about finding ways to solve the problem. These findings could perhaps be explained by Sharir, Tanasesu, Turbow and Maman (2007) and Cumsile and Epstein (1994) who posited that females have been found to receive more social support from friends and significant others, than their male counterparts. Females are more emotional as compared to males, thus share feelings more freely and readily with friends. Whereas males are expected to live up to certain social expectations that have been set and that sharing feelings is a sign of weakness.

CONCLUSIONS

This study gender differences in the perceived level of stress. Female had high levels of stress than male undergraduate students. The findings of this study also indicated that male participants had a significant difference in stress coping scores than female participants. This study revealed that male students are more likely to use better stress coping strategy than female students.

Implications

There is a need for the college administration to increase counselling services, to help mitigate the level of stress facing students. Appropriate coping skills should be taught to students to help them avoid maladaptive coping skills.

Whereas this study has made some contribution to the existing literature, the findings of this study are only limited to undergraduate students. Further research is needed on other samples such as secondary schools and middle-level college to determine whether there is support for this study.

APPENDIX A

This research attempts to study gender differences in the perceived level of stress and coping strategies among College students. The information obtained from this research will be kept confidential and used for research purposes only. Please find enclosed a personal data sheet and a questionnaire to be filled up.

PERSONAL DATA SHEET

Initials :
Gender :
Age :
College :
Year & Department :

Father's Education :
Occupation :
Mother's Education :
Occupation :

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Perceived Stress Scale (PSS)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with checkrow of ten you felt or thought certain way.

	Never	Almost never	Some-times	Fairly often	Very often
1. In the last month, how often have you been upset because of something that happened unexpectedly?	<input type="checkbox"/>				
2. In the last month, how often Have you felt that you were unable to control the important things in your life?	<input type="checkbox"/>				
3. In the last month, how often have you felt nervous and “stressed”?	<input type="checkbox"/>				
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	<input type="checkbox"/>				
5. In the last month, how often Have you felt that things were going your way?	<input type="checkbox"/>				
6. In the last month, how often Have you found that you could not cope with all the things that you had to do?	<input type="checkbox"/>				
7. In the last month, how often Have you been able to control irritations in your life?	<input type="checkbox"/>				
8. In the last month, how often Have you felt that you were on top of things?	<input type="checkbox"/>				
9. In the last month, how often have you been angered because Of things that were outside of your control?	<input type="checkbox"/>				
10. In the last month, how often Have you felt difficulties were piling up so high that you could not overcome them?	<input type="checkbox"/>				

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Conflict of Interests: The author declared no conflict of interests.

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