

# A COMPARATIVE STUDY OF PERCEIVED STRESS, TEST ANXIETY AND SELF EFFICACY: GENDER DIFFERENCES

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## Abstract

The aim of the present study was to compare Perceived Stress, Test anxiety and Self-efficacy between boys and girls students of college. Perceived stress and test anxiety are commonly found in students all over the world. To conduct the study a sample of hundred ( $N=100$ , male =50, female=50) college students of Amritsar city were selected and the age of subjects ranged between 20 to 24 years. Perceived Stress Scale (Cohen, (1980) was used to assess perceived stress, Test Anxiety Inventory (Spielberger, 1980) was used to assess test anxiety and Self-Efficacy Questionnaire (Muris, 2001) was used to assess self-efficacy. The results indicate that girls ( $M=19.52$ ,  $SD= 4.26$ ) compared to boys ( $M=17.82$ ,  $SD = 5.64$ ) demonstrated significantly higher perceived stress scores,  $t(98) = 1.70$ ,  $p = .046$ . Further, that boys ( $M=85.66$ ,  $SD= 16.85$ ) compared to girls ( $M=74.00$ ,  $SD = 10.72$ ) demonstrated significantly higher Self-efficacy scores,  $t(98) = 4.13$ ,  $p = .01$ . Results also indicated that boys ( $M=52.30$ ,  $SD= 5.60$ ) compared to girls ( $M=51.44$ ,  $SD = 6.02$ ) demonstrated significantly no difference in test anxiety (and its sub variables) scores,  $t(98) = 0.74$ ,  $p = .23$ . It can be concluded that college girl students experience high level of perceived stress than boys, boys showed higher level of self-efficacy than girls whereas test anxiety is experienced at same level by both girl as well boys.

**Key Words:** Perceived Stress, Test Anxiety, Correlation, Self-efficacy, Gender, etc.,.

## Introduction

Perceived Stress (PS further) may be defined as “a physical or psychological stimulus that can produce mental or physiological reactions that may lead to illness (physical, physiological and psychological or all)”. It is more about the feelings, about the uncontrollability and unpredictability than the actual stressors, it’s actually different. It is the preoccupation with thoughts that what could happen, and deciding that horrible things are

certain. PS is a dynamic multidimensional concept, with a wide spectrum of causative and conducive factors (Moore & Cooper, 1996).

It is not about measuring the frequency of perceived stressful events rather it is about how an individual feels about the general perceived stressfulness of their life and their ability to handle such perceived stress. College life is deemed as a stressful time period when students go through their major life transition into adulthood (Darling et al., 2007). The main source of PS among the adolescent students is their examination or academic perceived stress (Varghese, Norman & Thavaraj, 2015). It is clear from the research findings that high levels of perceived stress can result in number of health issues including weak immune system, mental fatigue, anxiety and depression. Further, university students worldwide are observed to be a high risk group with a prevalence of higher perceived stress level than the general population (Stewart et. al., 2000).

Gender is an important determinant of human health, and there is a clear pattern for the sex-specific prevalence rates of various mental and physical disorders. Susceptibility to infectious diseases, hypertension, aggressive behavior, and drug abuse is generally observed to be higher in men. Conditions such as autoimmune diseases, chronic pain, depression, and anxiety disorders are relatively more prevalent among women (Holden, 2005; Kajantie & Phillips, 2006; & Lundberg, 2005). There is a difference in the stress response exhibited by men and women (Verma, Balhara & Gupta, 2011). It is characterized by ‘fight-or-flight’ in men and ‘tend-and-befriend’ in women. The stress response specifically builds on attachment care-giving processes in females (Taylor et al., 2000). The hypothesis that stress responses in men may be primarily characterized as “fight-or-flight” is supported by the observation that Right Parieto-Frontal Cortex activation and Left Orbitofrontal Cortex deactivation with stress is predominately observed in the male brain. Involvement of the limbic system including ventral striatum, putamen, insula, and cingulate cortex underlies the stress response in females (McClure, York & Montague, 2004). The observed limbic activation to stress in female subjects is more consistent with a ‘tend-and-befriend’ rather than a ‘fight-or-flight’ model.

The importance of self-efficacy on mental health of adolescents has been revealed by research (Muris et al., 2001; Muris, 2002). High level of perceived stress has been found to be associated with low levels of self-efficacy (Cho and Kim, 2014; Park, Kim, and Jung, 2008; Han, 2005). Self-efficacy beliefs influence goals and aspiration, and consequently shape the results people expect from their efforts. People with high self-

efficacy expect better outcomes whereas people with low self-efficacy expect their efforts to result in poor outcomes (Bandura, 2004).

Self-efficacy beliefs are important factors in the regulation of human behaviour and motivation and coping with anxiety (Walteers, 1998). Self-efficacy is one's capability to utilize and execute coping resources to manage stress (or perceived) in changing and challenging situations (Bandura, 1977), a sense of mastery for doing of special activities (Bandura & Adams, 1977). About 40% of the test anxiety is predictable with self-efficacy (Capa & Loadman, 2001). The students with low self-efficacy, as compared with high self-efficacy students, consider their task more difficult, this leads to perceived stress and anxiety in them and they face a decline in their performance (Arabian et al., 2004).

The test anxiety is an emotional-cognitive phenomenon that plays an important role the function and promotion of pupils and student (Chapell et al., 2005). It is a form of performance anxiety - a feeling someone might have in a situation where performance really matters or when doing well is on pressurised (Hoffses, July 2018). Test anxiety makes people doubt their potentials. Therefore, who are suffering from test anxiety, cannot perform well even if they know the answers of the questions (Sargolzari, Samari, & Keyrodi, 2003), and it (test anxiety) has adverse impacts on the effectiveness of students, talents and the formation of personality and social identity of them. The test anxiety gradually become stable trait and is often associated with feelings of inadequacy (Ergene, 2003).

Perceived stress and test anxiety are commonly found in students all over the world. It is a combination of physiological over-arousal, tension along with worry, fear of failure that occurs before, during or after test situations. The perceived stress and test anxiety can impair the performance, skills of the student. It makes difficult for them to concentrate and to focus; consequently they feel helpless and confused. Self-efficacy is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations. These beliefs are the determinant of how a human think, behave and feel. It is partly responsible for the selection of actions, for mobilization of effort and for persistence at a task.

The study helps to compare perceived stress, self-efficacy and test anxiety between the college male and female students.

## Hypotheses

On the basis of afore going discussion following hypotheses can be framed:

- I. A significant difference exists between boys and girls college students in relation to stress.
- II. A significant difference exists between boys and girls college students in relation to test anxiety.
- III. A significant difference exists between boys and girls college students in relation to self-efficacy.

## Methodology

### Sample

In the present study, a sample of hundred (N=100, male =50, female=50) college students of Amritsar city were selected and the tests were administered the same students. The age of subjects ranged between 20 to 24 years.

### Psychological Tools

The various tests employed in this study are as following:

**Perceived stress Scale (PSS)** - has been developed by Sheldon Cohen, Tom Kamarck, Robin Mermelstein (Cohen, Kamarck & Mermelstein, 1983). The 10-items test is a reliable and valid instrument for the assessment of perceived stress for college students. The co-efficient alpha reliability for PSS was 0.84 among college students with a test – retest reliability coefficient of 0.85. This test has been used successfully in India.

**Test Anxiety Inventory (TAI)** – has been developed by Charles d Spielberger (Spielberger, 1980) and is a self-reporting 20 items psychometric scale with WORRY ‘and EMTIONALITY sub scales. It is a highly reliable and valid test. The test-retest reliability coefficient of the test is 0.80 and has been used successfully in India.

**Self-Efficacy Questionnaire (SEQ)** - has been developed by Peter Muris in 2001 to measure self - efficacy in youths and is a 24 - item, 5-point scale. The SEQ is hypothesized to represent three domains of self-efficacy viz. **Academic self-efficacy**, **Social self-efficacy** and **Emotional self**. The total reliability of the scale is 0.79 and the validity is 0.88. The test has been used successfully in India.

## Results and Discussion

To investigate the significance of difference between the means, if any, of perceived stress, test anxiety and self-efficacy among college students on the basis of gender (boys and girls). Scores for perceived stress, test anxiety and self-efficacy were calculated for the respective psychological tools used for the purpose and t-test was applied to compare the *Means*. Table 1 gives a clear picture of the findings. The results show that girls ( $M=19.52$ ,  $SD= 4.26$ ) in comparison to boys ( $M=17.82$ ,  $SD = 5.64$ ) exhibited significantly higher perceived stress scores,  $t(98) = 1.70$ ,  $p = .046$ , whereas boys ( $M=85.66$ ,  $SD= 16.85$ ) as compared to girls

**Table 1. Significance of Difference between Mean Scores of perceived stress, test anxiety and self-efficacy between Boys and Girls College Students (N=100)**

S.N.	Variable	Mean		SD		t-value
		Boys	Girls	Boys	Girls	
		(N=50)	(N=50)	(N=50)	(N=50)	
1.	Academic Self efficacy	28.74	24.28	5.08	4.04	<b>4.86**</b>
2.	Social Self efficacy	28.14	25.28	7.05	3.83	<b>2.52**</b>
3.	Emotional Self efficacy	28.78	24.44	7.67	5.41	<b>3.27**</b>
4.	Self-efficacy	85.66	74.00	16.85	10.72	<b>4.13**</b>
5.	Perceived Stress	17.82	19.52	5.64	4.26	<b>1.70*</b>
6.	Worry	21.86	21.44	3.49	2.97	0.65
7.	Emotionality	30.44	30.00	4.43	4.22	0.51
8.	Test anxiety	52.30	51.44	5.60	6.02	0.74
* Significant at 0.05 level of significance. ** Significant at 0.01 level of significance.						

( $M=74.00$ ,  $SD = 10.72$ ) scored significantly higher on Self-efficacy,  $t(98) = 4.13$ ,  $p = .01$ . Further, results indicated that boys ( $M=52.30$ ,  $SD= 5.60$ ) as compared to girls ( $M=51.44$ ,  $SD = 6.02$ ) demonstrated significantly no difference in test anxiety (and its sub variables) scores,  $t(98) = 0.74$ ,  $p = .23$ . From the results, inference can be made that significant gender differences exists for perceived stress and self-efficacy (and its three sub variables viz., Academic Self efficacy, Social Self efficacy & Emotional Self efficacy). Similar

results were found in previous researches (e.g., Burger et al., 2010; & Spence et al., 2010). Further, there are no significant gender differences for Test anxiety (and its two sub variables viz., Worry & Emotionality). These results are not consistent with some previous research on gender differences in test anxiety (e.g., Bandalos et al., 1995; & Núñez Peña et al., 2016).

Female students scored higher than male students on PSS and this may be understood in terms of gender roles in our society. Female students have to perform traditional roles in the home. Individual differences in stress reactivity have been proposed as a potentially important risk factor for gender-specific health problems in men and women (Kudielka & Kirschbaum, 2005; & Lundberg, 2005).

## CONCLUSIONS

The aim of the present study was to compare Perceived Stress, Test anxiety and Self-efficacy between boys and girls students of college. It can be concluded that college girl students experience high level of perceived stress than boys, boys showed higher level of self-efficacy than girls whereas test anxiety is experienced at same level by both girl as well boys. It can be concluded that self-efficacy plays a pivotal role in countering the effect of perceived stress and test anxiety among college students.

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