

## **PERCEIVED STRESS, TEST ANXIETY AND SELF EFFICACY: A CORRELATIONAL STUDY**

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**Abstract:** The aim of the study was to explore the relationship among stress test anxiety and self-efficacy experienced by college students. 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. Pearson product moment correlation was used to calculate the degree of relationship among afore mentioned variables. Results obtained indicated that there is significant positive correlation between perceived stress and test anxiety, significant negative correlation between perceived stress and self-efficacy, and significant negative correlation between test anxiety and self-efficacy.

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

### **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)”. PS has been considered as a 20th-century problem (Evans & Kelly 2004) and can be considered as a psychological threat, in which the individual appraise a situation as threatful (Day & Livingstone, 2003). It has been investigated largely as a correlate or predictor of physical and mental health issues (Doug all& Baum, 2001). It is part of daily life but people are prone to undergo a higher level of PS during major changes in their lives. College life is deemed as a stressful time period when students go through their major life transition into adulthood (Darling et al., 2007).

The operational route through which PS affects the health of adolescents is unclear yet but a common consideration is that perceived stressors change the autonomic nervous system, neuromuscular system, neurotransmitter integrity, endocrine and/or immunological functioning that increases the chances of development of an illness (Brantley & Ames, 2001; Kiecolt – Glaser, McGuire, Robles & Glaser, 2002).

PS is more about the feelings, about the uncontrollability and unpredictability than the actual perceived stressors, it's actually different. It is the preoccupation with thoughts that what could happen, and deciding that horrible things are certain. Further, all that have negative effects and spending hours worrying about what could happen, may cause the same physical, mental and emotional problems as worrying about the massive workload (Health Assured Team, 30 September, 2019). PS is a dynamic multidimensional concept, with a wide spectrum of causative and conducive factors. The perceptions comprise medical, physical, psychological, and psychosocial aspects and are both culturally and socially context dependent (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. 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 there is a positive relationship between PS, anxiety and depression (Eisen Barth et. al., 2013, Hammen et. al., 2004). 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).

High self-efficacy has significant effect on mental health status and apt responses to perceived stressors. Research has delineated the importance of self-efficacy on mental health of adolescents (Muris et al., 2001; Muris, 2002). High level of perceived stress has been found to be associated with low levels of self-efficacy (Park, Kim, and Jung, 2008; Han, 2005; Torres and Solberg, 2001). Furthermore, several studies (Cho and Kim, 2014; Rayle et al, 2005) indicated that high level of perceived stress predicted low levels of self-efficacy.

Self-efficacy is an important antecedent because it affects health and behaviour directly through its influence on the other determinants. Self-efficacy beliefs influence goals and aspiration, and consequently shape the results people expect 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 not merely the possession of coping skills but a belief regarding one's capability to utilize and execute coping resources to manage stress (or perceived) in changing and challenging situations (Bandura, 1977). It is a sense of mastery for doing of special activities that the trust, confidence and self-esteem of each person for doing of activities have an important role (Bandura & Adams, 1977). About 40% of the test anxiety is predictable with self-efficacy (Capa & Loadman, 2001).

The test anxiety is an emotional-cognitive phenomenon that plays an important role the function and promotion of pupils and student (Chapellet 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 skeptical about their capabilities and its consequent is reduction of such situations that makes people in dealing with the evaluation. Therefore, who are suffering from test anxiety, although they know the answers to questions but the anxiety is to the extent that they cannot use from their information for answering of the questions (Sargolzari, Samari, & Keyrodi, 2003).

The test anxiety threatens the psychological health of students and pupils and it 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). The students with high self-efficacy considered their tasks as challenges that must be mastered on them and in the case of failure apply greater effort. But people with low self-efficacy in dealing with their tasks considered them more difficult as it is, and this issue leads to perceived stress and anxiety in them and they faced are faced with a decline in their performance (Arabian et al., 2004).

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. This creates significant impact on the performance and the normal functioning of the student. The perceived stress and test anxiety can impair the performance, skills of the student. It makes them difficult to concentrate and to focus. They feel helpless and confused. PS and Test anxiety have broader consequences which affect academic, social and emotional arenas of students' life. Self-efficacy affects every area of student's life. 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 analyse the relationship of perceived stress, self-efficacy and test anxiety among the college students. Thus, it becomes very interesting to know how perceived stress, self-efficacy and test anxiety are related to each other.

### **Hypotheses:**

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

- I. There will be significant positive correlation between Perceived stress and Test Anxiety among College Students.
- II. There will be significant negative correlation between Perceived stress and Self-efficacy among College Students.

- III. There will be significant negative correlation between Test Anxiety and Self-efficacy among college students.

**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.

**Research design:**

A research design is a systematic approach that a researcher uses to conduct a scientific study. It is an overall synchronization of identified components and data resulting in a plausible outcome. The aim of the study was to explore the relationship among stress test anxiety and self-efficacy experienced by college students.

**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) is the most widely used psychological instrument for measuring the perception of perceived stress. It is a measure of the degree to which situations in one's life are appraised as perceived stressful. The questions in the PSS ask about feelings and thoughts during the last month. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The students are encouraged to respond to all the items. The test has 10 items. It is a reliable and valid instrument for the assessment of perceived stress in college students. The co-efficient alpha reliability for PSS was 0.84 among college students with a test – retest 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 EMOTIONALITY sub scales, developed to measure individual differences in test anxiety as a situation specific personality trait. Spielberger has reported that this is a highly reliable and valid test. The test-retest reliability coefficients have also been reported by different researchers, for time periods varying from two weeks to six months. The reliability coefficients were 0.80 or higher for shorter periods, but dropped to 0.62 for a group of high school students who were tested after 6 months. This test has even 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 contains 24 items that are hypothesized to represent three domains of self-efficacy viz. **Academic self-efficacy, Social self-efficacy and Emotional self.** This is a reliable and valid test, as reported by Bandura (1999). It has been used in India. The total reliability of the scale is 0.79 and the validity is 0.88.

**Results and Discussion:**

As the present study is intended to find out the relationship among perceived stress, test anxiety and self-efficacy of college students, Pearson's Product Moment correlation technique was employed.

**Table 1. Coefficient of Correlation between Perceived stress and Test Anxiety among College Students (N=100).**

Group	N	r
College Students	100	0.62**
Boys	50	0.57**
Girls	50	0.65**

\*\* Significant at 0.01 level of significance.

It is clear from **Table 1** that there is a significant positive correlation ( $r = 0.62, p < 0.01$ ) between perceived stress and test anxiety among college students. This means if there is increase perceived

stress there would be increase in level of test anxiety among college students (and vice-versa) Jain&Singhai(2017-2018) in study found that Stress can result in depression, anxiety and many other hazardous conditions. For boys it is significant positive ( $r = 0.57, p < 0.01$ ) which shows that if there is increase perceived stress there would be increase in level of test anxiety among male college students (and vice-versa). A significant negative relationship between perceived stress and test anxiety among boys, and for girls, again, it is positive and significant ( $r = 0.65, p < 0.01$ ) which shows that if there is increase perceived stress there would be increase in level of test anxiety among college girl students (and vice-versa). Female had more effective time management behaviours than males, but also experienced higher academic stress and anxiety. Males benefited more than females from leisure activities (Mishra and McKean, 2000).

As a significant positive correlation was found between perceived stress and test anxiety among college students irrespective of their gender, therefore Hypothesis I stand accepted.

Further as significant negative relationship was found between perceived stress and test anxiety among college students irrespective of their gender.

**Table 2 Coefficient of Correlation between Perceived stress and Self-efficacy among College Students (N=100).**

Group	N	r
College Students	100	-0.56**
Boys	50	-0.59**
Girls	50	-0.45**

\*\* Significant at 0.01 level of significance.

**Table 2.** shows that the coefficient of correlation between perceived stress and self-efficacy among college students ( $r = -0.56, p < 0.01$ ) which is negative and significant and shows that there is a significant negative relationship between perceived stress and self-efficacy among college students. Shilpa& Prasad (2017, September) also found a significant but moderate negative correlation between self-efficacy and perceived stress. For boys it is ( $r = -0.59, p < 0.01$ ) negative and significant shows that there is a significant negative relationship between perceived stress and self-efficacy among boys, and for girls, again, it is negative and significant ( $r = -0.45, p < 0.01$ ) which shows that there exists a significant negative relationship between perceived stress and self-efficacy among girls.

Further as significant negative relationship was found between perceived stress and self-efficacy among college students irrespective of their gender, therefore Hypothesis II stands accepted. It may also be concluded that the college students who have high self-efficacy may experience less perceived stress whereas the college students who have low self-efficacy may experience more perceived stress.

**Table 3 Coefficient of Correlation between Test Anxiety and Self-efficacy among college students (N=100):**

Group	N	r
College Students	100	-0.41
Boys	50	-0.47
Girls	50	-0.52

\*\* Significant at 0.01 level of significance.

It is clear from **Table 3.** that there is negative and significant of correlation ( $r = -0.41, p < 0.01$ ) between test anxiety and self-efficacy among college students. For boys it is negative and significant ( $r = -0.47, p < 0.01$ ) and for girls it is, again, negative and significant ( $r = -0.52, p < 0.01$ ) which shows that there exists a significant negative relationship between perceived stress and self-efficacy among boys and girls respectively.

As a significant relationship was found between test anxiety and self-efficacy among college students irrespective of their gender, therefore Hypothesis III stating, "A significant negative relationship exists between test anxiety and self-efficacy in college students." stands accepted. Asayeh et al. (2018) in a study revealed that the students with higher self-efficacy experience lower test anxiety.

Fusco (2014) also found similar results. Further as significant negative relationship was found between test anxiety and self-efficacy among college students irrespective of their gender, it may also be concluded that the college students who have high self-efficacy deemed to experience less test anxiety whereas the college students who have low self-efficacy deemed to experience more test anxiety.

### Conclusions:

The aim of the study was to investigate the relationship amongst perceived stress, test anxiety and self-efficacy. From the results and discussion done above it be, very precisely, concluded that perceived stress can increase level of test anxiety among both male and female college students (and vice-versa), though the degree of positive correlation between perceived stress and test anxiety is higher for female students as compare to male students. Further, the significant negative correlation between perceived stress and self-efficacy indicates that there is decrease in self-efficacy with increase in perceived stress for both male and female students (and vice-versa). Another finding that there is significant negative correlation between test anxiety and self-efficacy indicates that as self-efficacy decreases test anxiety increases (and vice-versa). 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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