

# A Study of Relationship between Stress and Academic Achievement at Senior Secondary School Level of A.M.U.



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## Abstract

The study was conducted in two schools of A.M.U Aligarh, comprised of senior secondary level. Sample was drawn randomly, keeping in view the needs and objectives of study. Samples were the adolescents between the age group of 14-18 years of age. Sample size includes 100 girls and 100 boys. The adolescent male and female students were further split on the basis of academic achievement between two groups: high achievers and low achievers. There were 62 high achiever females and 38 low achiever females from senior secondary girls, A.M.U and there were 55 high achiever male and 45 low achiever males from senior secondary school boys, A.M.U.

The investigator used student stress scale developed by Hussain in 1997 to determine the relationship of stress and academic achievement. The scale consisted of 57 items with the four point alternative response category from "no stress at all" to extreme stress". The Cronbach's coefficient alpha of this inventory is 0.96 and validity of the scale is established through content, factorial and construct methods. The investigator considered the examination marks as the academic achievement measures. The statistical techniques employed were mean, standard deviation, standard error of mean, t-test and item total correlation.

**Keywords:** Randomly, Adolescents, Academic-Achievement, Stress-Scale, Cronbach's Coefficient Alpha.

## Introduction

**"Much of the stress that people feel,  
Doesn't come from having too much to do,  
It comes from not finishing what they have started".**

Adolescence is a transitional stage of physical and mental human development that occurs between childhood and adulthood. Experts think that from childhood into through adolescence is composed of a set of transitions i.e. biological transition, cognitive transition, emotional transition and social transition.

Stress is considered as a pattern of physiological reactions that prepare an organism for action, either "fight or flight". Stress can have both positive and negative consequences, but it is important that individuals can find their optimal stress levels. All the situations that requires adjustment and adaptation, whether positive or negative are stressful. The variation of stress includes eustress, distress, hyper-stress and hypo-stress. Miller (1995) has classified four types of stress which includes frustration, conflict, change and pressure. Stress may be acute or chronic. Various causes of stress among adolescents include school, relationships, busy schedules, family, self esteem, social pressure, appearance and issues at home.

Achievement is the performance of the learner. Academic Achievement is the knowledge attained or skills developed in the school subjects, usually designated by test scores or by marks assigned by teachers or by both.

The present work is concerned with the stress as a personality variable and attempts to investigate the relationship between stress and academic achievement.

Various studies attempted to know about adolescent coping and support of adolescents. It has been found that some students used coping strategy focusing on stronger peer social network while some focusing on school environment. Rachna and Neeta in their study shows Anxiety and Academic Achievement have a definite relationship and they are negatively

# Periodic Research

related as the anxiety increases the academic achievement decreases. The boys of non working women possess low anxiety so his academic achievement high comparison to girls of non working women. Girls are anxious so their academic achievement is low comparison to boys. This is when girls and boys are mentally healthy and then they perform better and motivated to work hard in order to achieve more and more success in their lives.

**Objectives of the Study**

1. To compare the stress scores of the high achiever students and low achiever students.
2. To compare the sex differences in stress level among adolescents students.
3. To determine the effect of stress on the academic achievement of adolescent male students.
4. To determine the effect of stress on the academic achievement of adolescent female students.

**Review of Literature**

**Anna Zajacova & Scott M.Lynch (2005)** studied about self-efficacy, stress and academic success in college. They developed survey instrument to measure the level of academic self efficacy and perceived stress associated with 27 colleges related tasks. Scale showed moderately negatively correlation.

**Neelam Sharma(2009)** studied that students who experienced yoga module performed better in overall academics as well as in their separate subjects than those who did not experience yoga module.

**Shazia Malik and Ghazala Rehman (2010)** studied about relationship of optimism/pessimism, vulnerability to stress and academic achievement of college students. A sample of 100 students was studied. Results indicates that optimistically oriented people are less susceptible to stress and are high achievers. Whereas, pessimistic people are more prone to excessive worries and tensions.

**Veena N and Shailaja Shastri (2016)** studied stress among students of high and low academic performance. The questionnaire was administered on 656 pure science and applied science under graduate students from Bangalore city. The findings of the study showed that majority of the students' perceived education as more stressful. High and low academic performing students as well as pure and applied science course students differed significantly on sources of stress.

**Methodology**

The study was conducted in two schools of A.M.U, Aligarh i.e. senior secondary boys school and senior secondary girls school.

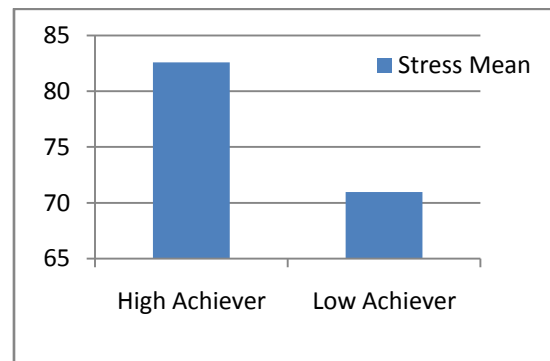
Sample size for the study was 200. Sample was drawn randomly, keeping in view the needs and objectives of study. Samples were the adolescents between the age group of 14-18 years. Sample includes 100 boys and 100 girls from senior secondary level. The adolescent male and female students were further split on the basis of academic achievement between two groups i.e high achievers and low achievers.

The investigator used student stress scale developed by Hussain in 1997 to determine the relationship of stress and academic achievement. The scale consisted of 57 items with four point alternative response from "no stress at all" to "extreme stress". The examination marks was considered as academic achievement measure. The statistical techniques employed were mean, standard deviation, standard error of mean, t-test and item total correlation.

**Findings of The Study**

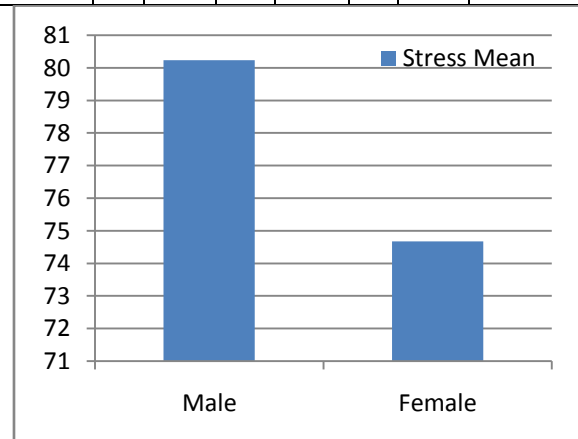
**Table 1.1**  
**Comparison between the mean stress scores of the high achievers and low achievers.**

Subject	N	Mean	SD	SERR	Df	t-value	Significant / Not Significant
High Achiever	117	82.58	10.10	0.605	198	2.01	Sig at 0.05 level
Low Achiever	83	70.98	70.98				



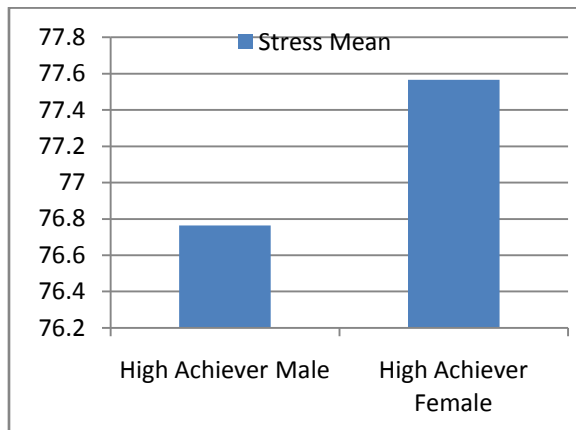
**Table 1.2**  
**Comparison between the mean stress scores of male and female students.**

Subject	N	Mean	SD	SERR	Df	t-value	Significant / Not Significant
Male	100	80.23	5.90	0.596	198	3.03	Sig at 0.01 level
Female	100	74.67	4.41				



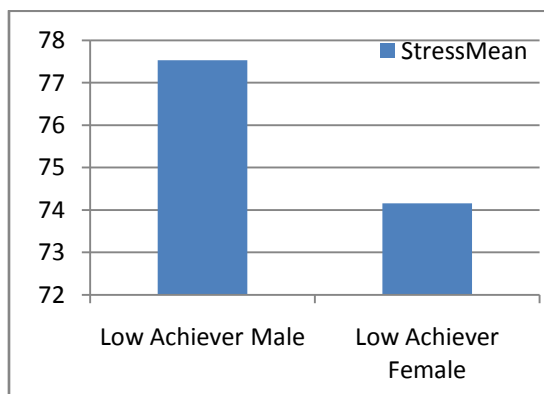
**Table 1.3**  
**Comparison between the mean stress scores of high achiever male and high achiever female students.**

Subject	N	Mean	SD	SERR	Df	t-value	Significant / Not Significant
High Achiever Male	55	76.764	5.92	0.787	115	0.237	Not Significant
High Achiever Female	62	77.565	6.17				



**Table 1.4**  
**Comparison between the mean stress scores of low achiever male and low achiever female students.**

Subject	N	Mean	SD	SERR	Df	t-value	Significant / Not Significant
Low Achiever Male	45	77.533	6.12	0.913	81	0.877	Not Significant
Low Achiever Female	38	74.158	5.73				



### Conclusion

After statistical analysis, the following conclusions were drawn according with hypothesis and result of the study:

1. There is a significant difference between mean stress score of the male and female students.
2. There is no significant difference between mean stress score of the high achiever male and high achiever female students.
3. There is no significant difference between mean stress score of the low achiever male and low achiever female students.
4. There is a significant difference between mean stress score of the high achievers low achievers.
5. There is no significant difference between mean stress score of the high achiever male and low achiever male students.
6. There is no significant difference between mean stress score of the high achiever female and low achiever female students.

### Significance of the Study

The development and progress of any nation in the world mainly depends upon its educational system. The study has been taken up by the researcher to study the level of stress among adolescents. This study will help the researcher in understanding the level of stress and its relation with academic achievement. As adolescents are the future of nation, their activities, behavior and attitudes have great impact on them. Since academic achievement is believed to be the key of social acceptance and future security and in this stress plays a very significant role that is stress reduces the level of academic achievement and that is why study is being conducted. This study reveals new aspects of stress and academic achievement and will also open the doors for the further research work.

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