

## SCHOLASTIC ACHIEVEMENT IN RELATION TO ACADEMIC STRESS AMONG ADOLESCENTS

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### ABSTRACT

*Scholastic achievement is the most important goal of education. Marks obtained are recorded as the most valuable guide for classification and placement of students in different occupations at the time of employment. That is why special stress is being given to assessment and examination. There are various aspects of the concept of academic achievement which has a great bearing on the personality of the students from the early age. Academic Achievement is a dynamic variable resulting from the dynamic interaction of at least three major groups of variables viz. socio-economic variables, educational variables and pupil variables. Biological and health variables also have strong influence on academic achievement of a child. Each one of these is actually a cluster of variables, which individually or in interaction with others have their influence on achievement. Academic achievement is also affected by cognitive factors like intelligence, motivation, creativity, non-cognitive factors including aptitude, level of aspiration, physical and mental health, self-concept of the learner, social factors like home environment, class environment, family environment, socio-economic status. The personal factors like stress, frustration too can affect academic achievement, both positively and adversely.*

Academic achievement has always been centre of educational research. The importance of scholastic achievement question for educational researchers viz. what factors promote academic achievement in students? How far do the different factors contribute towards academic achievement? Researchers have come out with varied results, at time complementing each other, but at times contradicting each other.

Academic achievement is related to the acquisition of principles, generalization and the capacity to perform efficiently (certain manipulation of objects, symbols and ideas). Assessment of academic performance has

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largely been confirmed to the evaluation in term of information, knowledge and understanding. It is universally accepted that the acquisition of factual data is not an end in itself but an individual who has received education should show evidence of having understood them. For obvious reason the examinations are largely confined to the measurement of the amount of information which students has acquired. Wood and Learned (1938) concluded through their there well known Pennsylvanian study that education was unavoidably intellectual, in which knowledge was the dominating feature of educational outcomes. It is perhaps the only expected basis for promotion or to fulfill the requirement for degree or diploma. It is the actual or assumed possession of knowledge that counts either for admission into a class or course.

Scientific and technological progress all over the globe has made man highly sensitive, critical and creative. Associated with this growth is emergence of stress. The concept of stress may be different according to the individual's state of context and interpretation. It is recognized that certain amount of stress is desirable, tolerable and productive whereas excessive stress may damage person's self and ruin his life. The term stress originated in physical sciences which meant a force exerted upon a person, who resists the force/pressure in his effort to maintain his original state and in the process suffers some degree of discomfort.

Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure or even an awareness of the possibility of such failure. Academic stress has become a source of immediate concern as it also contributes to major health hazards and problems, both physical and mental. Stress related diseases viz. high blood pressure, peptic ulcers, allergies, headache seem to have reached an epidemic proportion. Stress makes a significant contribution to the prediction of subsequent school performances and act as a negative predictor of academic performance in school children (Endler et. al, 1994).

### **OBJECTIVES OF THE STUDY**

The study was conducted to find the difference between the academic achievements of boys and girls.

The study was conducted to find the difference among boys and girls in respect of different components of academic stress.

The study was conducted to find the relationship between academic achievement and academic stress among adolescents.

### **NEED OF STUDY**

With the advancement of science and technology, people have become career minded. So, the significance of academic achievement has increased day by day. Schools tend to emphasize achievement, which helps in promoting the wholesome growth and development of a child but at the same time give serve degree of anxiety, frustration or pressure to the adolescents. It is assumed that the academic stress may be one of the variables affecting the academic achievement of the adolescents.

### **REVIEW OF RELATED STUDIES**

**Kumar, Awadesh (1986)** conducted a study of ego-involvement, level of aspiration and associated factors in relation to achievement at graduate level. He concluded that most of the undergraduate students showed academic achievement of an average level. There was no significant difference in the achievement of boys and girls belonging to arts and biology groups. They appeared to be scoring similar marks at graduation level.

**Verma and Gupta (1990)** concluded that academic stress among adolescents was chiefly caused by examination system.

**Mohammad Ali (1999)** in his study investigated the academic stress and self esteem of Malaysian students towards mathematics and studied whether there was any relationship between the attitude towards mathematics and their achievement. Achievement was found to be significantly correlated with the attitude towards mathematics.

**Kuney. M.T. (2001)** investigated long term effects of the pre-first grade program on student's achievement and student's psychological domain characteristics as measured in 7<sup>th</sup> or 8<sup>th</sup> grade. No significant differences were found.

**Seema (2003)** in a study entitled 'Achievement of grade 9<sup>th</sup> students in Hindi with respect to academic stress and home environment' reported that high levels of academic stress caused low achievement in academics. The male students were less prone to academic stress than the female students and achievement was better than female students even in equal levels of academic stress.

**Kashyap and Sidhu (2005)** studied differences in stress and coping mechanisms used by adolescents in science and commerce stream. They found higher academic stress among adolescents of science stream as compared to commerce students.

**Bajwa and Kaur (2006)** studied “Academic Achievement in relation to family environment and academic stress” and concluded that there exists a significant relationship between academic achievement and family environment, significant relationship between academic achievement and competitive framework dimension of family environment, significant relation between academic achievement and academic stress.

**Viven S. Huan (2008)** in a study obtained that only scores on the Personal Concern subscale of adolescent concerns were positively associated with the academic stress arising from self and other expectations in both adolescent boys and girls. For the girls, school related concerns were also predictive of academic stress arising from other expectations.

**Ghaderi, A. R., Kumar and Kumar (2009)** concluded from their study that male and female students equally experience the depression and anxiety and that also irrespective of the countries.

**A.K. Amanulla, P.K.Aruna(2009)** in their study on academic achievement in relation of social phobia and socioeconomic status found that there is negative correlation between social phobia and socioeconomic status suggesting that if the parents are educated and economically sound, the social phobia can be removed.

### HYPOTHESES OF THE STUDY

There exist a significant difference in academic achievement of boys and girls.

There exist a significant difference in different components of academic stress viz. frustration, conflict, pressure, anxiety among boys and girls.

There exist a significant relationship between academic achievement and academic stress of adolescents.

### **SAMPLE OF THE STUDY**

The sample for the present study consists of 200 ninth grade students of P.S.E.B. schools from Ludhiana district of Punjab State. Six schools were selected of which three were Govt. Schools and three Private schools.

### **TOOLS USED**

For Academic Achievement of the students, the marks of the 8<sup>th</sup> class were taken from their office record.

Academic Stress Scale by Abha Rani Bisht, for measuring academic stress. Stress is conceptualized as having following components:

- Frustration
- Conflict
- Pressure
- Anxiety

Frustration is based on delays, lack of resources, losses and failures. Conflict is of three types – approach-avoidance, double-approach and double avoidance conflicts. Pressure is based on competitive achievement, sustained concentration of efforts and rapid changes. The worry items of Anxiety are on conscious concern about consequences, negative expectation and negative self evaluation. The emotionality items of Anxiety are on uneasiness and nervousness.

Academic stress scale has 80 items, out of which 29 were negative and the rest were positively worded. The positive and negative items were scored as 0, 1,2,3,4 and 4, 3,2,1,0 respectively. Out of 80 items, 26 were for Academic Frustration, 15 each for Academic conflict and Academic Anxiety while Academic Pressure was found with 24 items.

### **STATISTICAL TECHNIQUES**

Following statistical techniques have been used for the analysis of data:

1. Descriptive statistics such as Mean, Median, S.D, Skewness and Kurtosis to ascertain the nature of distribution of variable.
2. t-test is used to ascertain the difference of means.
3. Product moment correlation is used to find the relationship of academic achievement with academic stress.

### ANALYSIS AND INTERPRETATION OF THE DATA

**Table-I**

Significance of Mean difference of '**Academic Achievement**' of Boys and Girls

Groups	Mean	S.D.	t-ratio
Boys	485.650	93.171	0.722 ns
Girls	477.080	73.514	

The calculated t-ratio (0.722) being less than 1.96 reveals that boys and girls do not differ significantly from each other in their academic achievement. The hypothesis that 'there exist significant difference in academic achievement of boys and girls' is rejected.

**Table -II**

Significance of Mean difference of '**Academic Frustration**' among Boys and Girls

Groups	Mean	S.D.	t-ratio
Boys	111.360	8.555	4.101**
Girls	104.940	13.112	

The calculated t-ratio (4.101) being greater than 1.96 & 2.58 reveals that there exists a significant difference in 'Academic Frustration' among boys and girls at 0.05 & 0.01 level of the significance measure. The mean value of academic frustration among boys (111.360) being higher than that of girls (104.940) reveals that boys have significantly higher frequency of academic frustration as compared to girls.

**Table -III**

Significance of Mean difference of '**Academic Conflict**' among Boys and Girls

Groups	Mean	S.D.	t-ratio
Boys	45.540	6.913	0.525 ns
Girls	44.950	8.847	

The calculated t-ratio (0.525) being less than 1.96 & 2.58 reveals that there does not exist significant difference in 'Academic Conflict' among boys and girls.

**Table – IV**

Significance of Mean difference of '**Academic Pressure**' among Boys and Girls

Groups	Mean	S.D.	t-ratio
Boys	92.390	13.138	2.405*
Girls	96.880	13.265	

The calculated t- ratio (2.405)being greater than 1.96 reveals that there exists significant difference in 'Academic Pressure' among boys and girls at 0.05 level of significance. Moreover the mean value of academic pressure among girls (96.880) being higher than that of boys (92.390) reveals that girls have significantly higher frequency of academic pressure as compared to boys.

**Table- V**

Significance of Mean difference of '**Academic Anxiety**' among Boys and Girls

Groups	Mean	S.D.	t-ratio
Boys	37.250	5.413	5.222**
Girls	43.870	10.697	

The calculated t-ratio (5.522) being greater than 1.96 and 2.58 reveals that there exist a significant difference in 'Academic Anxiety' among boys and girls at 0.05 & 0.01 level of significance. Moreover, the mean value of academic anxiety among girls (43.870) being higher than that of boys (37.250) reveals that girls have significantly higher frequency of academic anxiety as compared to boys.

The Hypotheses that 'there exist a significant difference in different components of academic stress among boys and girls' is rejected for academic conflict while the hypotheses is not rejected for academic frustration, academic pressure and academic anxiety.

**Table – VI**

Significance of coefficient of Correlation between **Academic Achievement** and **Academic Stress** of Adolescents

Variables	N	R
Academic Achievement	200	-0.037 ns
Academic Stress	200	

The coefficient of correlation between the scores of academic achievement and academic stress of boys & girls is -0.037 which is negative but significantly less than the table value of coefficient of correlation (0.138) at 0.05 level of significance reveals that there does not exist significant correlation between academic achievement and academic stress of adolescents. The hypothesis that there exist a significant relation between academic achievement and academic stress of adolescents is rejected.

### **CONCLUSIONS AND EDUCATIONAL IMPLICATIONS**

A research work is meant for developing new dimensions and for forwarding innovation steps in related field of work. This study will prove to be expendably significant in the field implication.

The study in hand was conducted to find out the academic achievement of adolescents in relation to academic stress. And it is concluded from the study that boys and girls do not differ significantly from each other in their academic achievement. Significant correlation was not found between academic achievement and academic stress of adolescents. Boys had higher frequency of frustration as compared to girls; while on the other hand, girls had higher frequency of pressure and anxiety as compared to boys. But they did not differ significantly from each other in academic conflict.

To reduce the higher frequency of frustration in boys and higher frequency of anxiety and pressure among girls, there is much need to involve them in co-curricular activities. There should be more provisions of activities according to their capabilities and interests to achieve more. SUPW and Craft oriented education help the adolescents to know more about their own level interest, areas of interest and can help them to reduce their levels of stress.

Parents must educate their girls so that they become the maker of their own destiny. Parents and teachers should make every effort to give them congenial and conducive environment so that their academic achievement may excel. Family members should create such an environment which helps them to the challenges of society and modern world efficiently. Teachers and school authorities should broaden the basis for evaluating pupils and allow maximum freedom to set their own goals and to alter them. These conditions can be achieved in different ways by using democratic teaching procedures keeping in mind the interest of the child and engaging them more in group activities. There should be provision for counseling by professional organizations in the educational institutions. The teacher should organize activities in such a way that the students should keep striving and give a promise of goals attainment. Sex education in schools can help the adolescents in overcoming stress at this juncture of life and ultimately helps them to achieve well academically.

### **DELIMITATIONS OF STUDY**

The present study has been delimited as:

The study is conducted on 200 adolescents (100 boys and 100 girls) only.

Adolescents of Distt. Ludhiana only constitutes the sample.

The students of only three Govt. and three Private Schools constitute the sample of study.

Only the students of Punjab School Education Board constitute the sample of study.

The study has been confined to adolescents studying in class-IX only.

### **SUGGESTIONS FOR FURTHER STUDIES**

The present study was confined to Ludhiana district only, it is, therefore suggested that comparative study may be conducted on more than one district. Similar study may be conducted on large sample to reach to very definite conclusions. Further studies may be conducted involving other variables like level of aspirations, achievement motivation, self-esteem, self-concept and adjustment etc.

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