

Academic Stress in Relation with Academic Achievement of Higher Secondary School Students

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Abstract: The present study aims to find the level of Academic Stress and Academic Achievement of the higher secondary schools students. It also tries to figure out the relationship between Academic Stress and Academic Achievement of the higher secondary schools students. It also tries to figure out the influence of Academic Stress on Academic Achievement of the higher secondary schools students. Survey method is employed and a sample comprising of 217 higher secondary students was selected by random sampling. A 5 point Likert type Academic Stress Scale consisting of 24 items was used to collect the data for the study. The data were subjected to descriptive, correlational and regression analysis. The results of correlation analysis showed that there is a significant negative relationship between Academic Stress and Academic Achievement of the higher secondary schools students. The results of regression analysis showed that there is a significant influence of Academic Stress on Academic Achievement of the higher secondary schools students.

Key words : Academic Stress, Pressure to Perform, Exam Fear and Academic Achievement.

1. INTRODUCTION

The ultimate aim of Education is the all-round development of the learner. Many students are unable to achieve this aim because of various factors. Academic Stress is one such factor, which has now become a big detriment for the students and called as 'career stopper' (Kadapatti & Vijayalaxmi, 2012). Students with high levels of Academic Stress may not only experience depression and anxiety but also exhibit behavioural problems, irritability (Deb, Strodl & Sun, 2015), and so on. Academic Stress may hamper the academic performance of the students and may affect their career and the overall life.

2. ACADEMIC STRESS AND ACADEMIC ACHIEVEMENT

Students usually go through a wide range hassles on a daily bases relating to their educational aspects like academic demands, high volume of assignments, pressure to obtain high marks, repercussions of getting low marks, the expectations of parents and teachers, one's own expectation, personal inadequacy and so on. Experiencing these pressure for a longer duration may result in Academic stress.

Academic Stress is stated as a mental distress arising due to academic failure or some anticipated fear of academic failure among the students. Bernstein et al. (2008) called the sources of stress as 'Stressors' and stated that they may threaten to disrupt peoples' daily functioning. There are many factors contribute to Academic Stress. Pressure to Perform, Exam Fear and Classroom Environment are the three important factors considered for the study. Mishra (2017) revealed that academic workload and fear of getting lower marks were the main sources of Academic Stress. Mehfooz and Haider (2017) and also Elias, Ping and Abdullah (2011) pointed out that academic pressure as the major cause of stress among students. Fear of failure causes lot of stress among students (Bataneh, 2013).

Academic Achievement is defined as the knowledge attained and is assessed through scores or marks obtained in the test and examinations.

3. NEED AND SIGNIFICANCE OF THE STUDY

Stankovska, Gordana et al. (2018) found a significant positive correlation between Academic Stress and high Academic Performance, but a negative correlation between Academic Stress and low Academic Performance. The researchers have also stated that Academic Stress is a significant predictor of the Academic Achievement among students. Karaman, Mehmet et al. (2019) reported that the female students have more academic stress than the male students. Chothani (2014)

reported that medium of instruction is associated with academic stress. Sohail (2013) reported a significantly high negative relationship between academic stress and academic performance while Siraj et al. (2013) reported the exact opposite.

Further Correlations and Regression analyses showed gender as significant predictors of academic stress. Struthers et al. (2000) found that greater academic stress covaried with lower course grades. O'Neill, Marissa et al. (2019) found lower academic stress among students who practiced daily self-care. Apart from affecting the health and well-being, symptoms of Academic Stress like depression and anxiety have an adverse effect on Academic Achievement as well (Bernal-Morales et al. 2015).

As Academic Stress have greater influence on Academic Achievement it is felt important to study them among the higher secondary schools students. Hence the present study aims to find out the relationship between Academic Stress and Academic Achievement of higher secondary school students and also the influence of Academic Stress on Academic Achievement of higher secondary school students.

4. OBJECTIVES OF THE STUDY

1. To study the Academic Stress and Academic Achievement of the higher secondary school students.
2. To study whether there is any significant relationship between Academic Stress and Academic Achievement of higher secondary school students.
3. To study whether there is any significant influence of Academic Stress on Academic Achievement of higher secondary school students.

5. HYPOTHESES OF THE STUDY

1. There is no significant relationship between Academic Stress and Academic Achievement of the higher secondary school students.
2. There is no significant influence of Academic Stress on Academic Achievement of higher secondary school students.

6. METHOD OF THE STUDY

'Survey method' is used for the present study. This study is intended to find the relationship between Academic Stress and Academic Achievement and also the influence of Academic Stress on the Academic Achievement of the higher secondary school students.

7. POPULATION AND SAMPLE

All the students studying in higher secondary schools in Vellore District of Tamil Nadu forms the Population of the study. By adopting the Random Sampling technique, 217 higher secondary school students were chosen as the sample by Random Sampling.

8. TOOLS USED FOR COLLECTION OF DATA

The Academic Stress Scale consisting 24 items was developed and validated by the researchers for the study. It is a 5 points Likert type scale. It is divided into three dimensions of Academic Stress namely, Pressure to Perform, Exam Fear and Classroom Environment. Each category is represented by 8 items.

For Reliability, Cronbach Alpha coefficient was found out to be 0.806 for the Academic Stress Scale. Its square root was found out to be 0.898 and it is the validity of the scale. Hence the tool is reliable and valid. Marks secured by the higher secondary school students in their board examinations were taken as scores of Academic Achievement. The tool was administered to all the participants of the study and the data were collected.

9. RESULTS AND INTERPRETATION

9.1 Results based on Descriptive Analysis

Table 1

Mean and Standard Deviation of Academic Stress and Academic Achievement for Entire Sample.

Variables	Mean	Standard Deviation
Academic Stress	79.90	9.737

Pressure to Perform	28.51	4.416
Exam Fear	25.86	6.622
Classroom Environment	25.53	3.917
Academic Achievement	68.75	16.199

The results shown in the Table 1 indicates that the Mean value and Standard Deviation value of Academic Stress, Pressure to Perform, Exam Fear, Classroom Environment and Academic Achievement for the entire sample.

9.2 Results based on Correlation Analysis

Table 2 Pearson's Correlation coefficient between Academic Stress and Academic Achievement.

Variables	1	2	3	4	5
Academic Stress	-				
Pressure to Perform	0.313**	-			
Exam Fear	0.716**	0.403**	-		
Classroom Environment	0.923**	0.331**	0.544**	-	
Academic Achievement	-0.402**	-0.305**	-0.465**	0.220**	-

** Correlation is significant at the 0.01 level (2-tailed).

Note: The correlation co-efficient value (r-value) were shown below the diagonal.

The result shown in the Table 2 indicates that the p-value for the correlation of Academic Stress and Academic Achievement is lesser than 0.01, therefore the null hypothesis is rejected. Hence there is a significant relationship between Academic Stress and Academic Achievement at 0.01 level of significance.

The r-value between Academic Stress and Scholastic Performance was found to be -0.402. Therefore it can be stated that there is significant negative relationship between Academic Stress and Academic Achievement at 0.01 level of significance.

There is significant negative relationship ($r = -0.305$) between Pressure to Perform and Academic Achievement even at 0.05 level of significance.

There is significant negative relationship ($r = -0.465$) between Exam Fear and Academic Achievement at 0.05 level of significance.

There is significant positive relationship ($r = 0.220$) between Classroom Environment and Academic Achievement at 0.01 level of significance.

9.3 Results based on Regression Analysis

The regression coefficient of the sample is denoted as β .

The null hypothesis and alternative hypothesis are formulated respectively as follows:

Null Hypothesis - H_0 is $\beta = 0$.

Alternative Hypothesis - H_1 is $\beta \neq 0$.

Regression Equation is given by $Y = a + \beta X$.

Where Y = Dependent Variable: Academic Achievement

X = Independent Variable: Academic Stress

a = Constant

**Table 3
Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.761	0.579	0.534	15.761

Predictors: (Constant), Academic Stress

Dependent Variable: Academic Achievement

The result shown in the Table 3 indicates that the R Square value is 0.579, therefore the Regression Model is fit. Also 57.90% of variation in the dependent variable is estimated by the independent variable.

Table 4
ANOVA

Model		Sum of Squares	Df	Mean Square	F	p - value
1	Regression	3270.283	1	3270.283	13.165	0.000
	Residual	53408.28	215	248.411		
	Total	56678.56	216			

Dependent Variable: Academic Achievement

Predictors: (Constant), Academic Stress

The result shown in the Table 4 indicates that the p - value is 0.000, which is less than 0.01 and the F ratio is 13.165. Therefore the null hypothesis is rejected at 0.01 level of significance. Hence the regression coefficient (β) is not equal to 0.

Table 5
Regression Coefficients

Variables	Unstandardized Coefficients		Standardized Coefficients	t	p - value
	B	Std. Error	Beta		
(Constant)	36.818	8.865		4.153	0.000
Academic Stress	-0.640	0.110	-0.420	3.628	0.000

Dependent Variable: Academic Achievement

The result shown in the Table 5 indicates that the t - value for constant is 4.153 and t - value for Academic Stress is 3.628 and p - value is 0.000, which is less than 0.01 for both the cases. It means the null hypothesis is rejected at 0.01 level of significance. Certainly the regression coefficient (β) is not equal to 0. The Regression Coefficient of the independent variable is -0.640 and Constant is 36.818. The Regression Equation of the results presented above is:

$$Y = 36.818 + (-0.640) X$$

$$\text{Academic Achievement} = 36.818 - (0.640) \text{ Academic Stress}$$

Academic Achievement will decrease by 0.640 times for every unit increase in Academic stress.

10. MAJOR FINDINGS

- i. There is significant negative relationship ($r = -0.402$) between Metacognition and Scholastic Performance at 0.01 level of significance.
- ii. Academic Stress influences Academic Achievement of higher secondary school students negatively. Academic Achievement will decrease by 0.640 times for every unit increase in Academic stress, as the regression equation is given by:
Academic Achievement = 36.818 - (0.640) Academic Stress.

11. CONCLUSION

If the students are to be successful in their career and life, they need to have a good academic record. The results show that Academic Achievement and Academic Stress are negatively correlated and also Academic Stress influences Academic Achievement of higher secondary school students negatively. It means Academic Stress may become a barrier for the students to have a successful career. Therefore it is imperative that the students are educated about academic stress and its adverse effect on their academic achievement and health, more importantly the ways to manage stress effectively.

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