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# Influence of Academic Stress on University Students Academic Performance

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#### Abstract

The present study investigates the influence of academic stress on student's academic performance among university students. The objectives of this study is to find out the influence of academic stress on academic performance of university level students and to compare the academic stress in terms of their gender and schools i.e. School of Engineering (SOE), School of Humanities and Social Sciences (HSS) and School of Sciences (SOS). A total of 120 University students were selected by random sampling technique from Tezpur University, India. Descriptive survey method was adopted in the study. The tool used in this study was Academic Stress Scale constructed by Rajendran & Kaliappan (1990). Academic performance t was measured using student's semester exams results. To find out the correlation between academic stress and academic performance Pearson productmoment correlation method was used and the result shows positive correlation. Further, it was also found that stress and academic achievement has no significant gender difference. The result also shows that there is no significant difference in academic stress among university level students in respect to their school.

Keywords: Academic Stress, Academic Achievement, University Students

#### Introduction

Stress is a natural human reaction that happens to everybody. When a human body experience changes and challenges (stressors), then human body produces physical and mental responses i.e. called stress. Stress can be both positive and negative. Positive stress will keep us alert, motivated and ready to avoid danger. But negative stress leads to problems when stressors continue without relief or relaxation. Stress may also be described as the physiological and neurological response to a new situation. (Franken, 1994). Stress becomes an important part of human life and society in recent years. It is become a matter of concern in academic circle as academic stress leads to various negative impact in student's life. Psychological conditions such as depressions, anxiety, drug abuse and suicidal ideation all are cause by extreme stress (BansalandBhave, 2006). Academic stress is described as stressful psychological circumstances caused by educational demands from parents, teachers, family members, and peers, as well as parental pressure for academic achievement and the examination system.

Academic stress between students has long been studied, and stressors such as too much coursework have been established by researchers. It is a mental distress caused by the anticipation of dissatisfaction associated with academic failure, or even the perception that such failure is possible. (Gupta and Khan, 1987).

Academic Performance is the result or the outcome of the performance of students in a formal educational setup. It is comprised of performances in the all the activities including curricular and co-curricular. Various factor affected the student academic achievement. It is often measures by the examination or through assessment. Now a days its not only a pointer to the effectiveness but a major determinant of the future of the youth. The researcher thinks that the relationship between stress and academic performance has become an important aspect in the present era. So, in this study the researcher will try to see the influence of academic stress on academic performance in respect to gender and different schools i.e. School of Engineering, School of Humanities and social science and school of sciences

## Literature Review

The study conducted by Kanta. S et. al (2018) on effect of academic stress on achievement motivation among college students. The purpose of the study was to find the influence of stress upon the academic achievement motivation if the college students. The investigator used purposive sampling method to collect data from 50 college students. Academic stress scale developed by Rajendran and Kaliappan (1990) and achievement motivation scale developed by Pratibha Deo and Asha Mohan (1985) was used for collection of data. The findings of the study tells that those who have moderate stress they had higher achievement motivation.

In the study conducted by Khan. M.J. (2013) on the effect of perceived academic stress on students performance. The purpose of the study is to explore the impact of academic stress on the performance of the students. The investigator taken total 150 sample from different university located in Islamabad. To collection of data the investigator used Sheldon Cohens perceived stress scale. The findings of the

study disclose that performance of the students is negatively effected by academic stress and the male and female perceived stress scale have significant differences.

A study conducted by Stankovska et.al (2018) on Emotional Intelligence test, anxiety and academic stress among University students in which the main objective is to study the relationship between university level students emotional intelligence test, anxiety and academic stress. 200 University students were taken as a sample. The tool used in this by the researcher were Self-report emotional intelligence test, Test Anxiety Inventory, Students Academic Stress Test. The outcome of the study reveals that intelligence, test anxiety, academic stress and gender have positive relationship.

A study conducted by Mehfooz. Q. et. al (2017) on Effect of stress on academic performance of Undergraduate medical students. The purpose of the study is to find out the stress level among medical students and also to see the correlation between the stress level and academic performance.200 undergraduate third year medical students were taken as a sample. The researcher used Medical stress or questionnaire to find out the effect of stress on students academic performance. Descriptive statistics was used to analyzed the data. This study shows that there is a correlation between stress and academics and moreover it also shows that medical students have high level of stress before exams.

A study conducted by Sindhu. P. (2016) on influence of academic stress on engineering students academic achievement. The main objective is to find out the relationship between stress and engineering students academic achievement. Few engineering college were taken as population for the study and 20 undergraduate students were taken as a sample by the researcher. The researcher used the Cohen Perceived Stress Scale among students to measure the stress level. The result of the study shows that both low and high scorers have high level of stress.

A study conducted by Azila. E.M. (2015) on stress and academic achievement: empirical evidence of business students in a Ghaninan polytechnic. The main objective of the study explore the sources of stress and what they effect of academic performance of business students. The investigator take 275

students as sample of the study through multistage sampling procedure. Cross sectional research design is used for designing the research study and Burgers (2009) five point Likert scale have been used by the investigator. The findings shows that no effect between the stress and academic performance.

Elias. H et. al (2011) conducted study on stress and academic achievement among the undergraduate students in university Putra, Malaysia. The main purpose of the study is to look over the stress and academic achievement of the students from a local university. Through cluster sampling the research select total 376 students as a sample .The researcher used the total grade points of the students for academic achievement of the students and used college undergraduate stress scale for evaluating the students stress .The findings reveals that the medical students face more stress as compared to the stress level of the undergraduate students .

## **Need and Significance of the Study**

In the present time, students face various academic problems, which include exam stress, inability to understand the subject or lack of interest towards class etc. Academic stress is the feeling of anxiety or apprehension over the ones performance mainly in the academic activities Stress is found to be a common problem to both male and female. Due to academic stress students unable to perform to the best of their abilities in examination. It also create problems in their academic performance. The present study designed to determine how academic stress influence upon the academic performance of the university level students. With this regard academic stress, academic performance will have significance to be studied. Therefore, the researcher gets motivated to select this study.

### Statement of the Problem

The problem selected for the present investigation is as follows: "Influence of Academic stress on University student's academic performance"

## **Objectives of the Study**

- 1. To find out the influence of academic stress on academic performance of university students.
- 2. To compare the academic stress of university students in respective of their gender.

 To compare the academic stress of university students in respect to their schools i.e. SOE, HSS & SOS.

### Hypotheses of the Study

- There is no significant relationship between academic stress and academic performance of university students.
- 2. There is no significant difference in academic stress among university students in respect to their gender.
- 3. There is no significant difference in academic stress among university students in respect to their school i.e. SOE, HSS & SOS.

## Research Methodology

In this study, the researcher employed descriptive research design using the survey method as a data collection method. The target population is a group of university students. The main and independent variable for the study is "academic stress" and dependent variable is "academic achievement." The population includes all the students pursuing postgraduate courses in three schools of Tezpur University located in Sonitpur District, Assam, India.In the present study, the sample chosenwere the students pursuing the postgraduate courses underSchool of Engineering (SOE), School of Humanities and Social Sciences (HSS) and School of Sciences (SOS). It includes both male and female students. Random sampling technique was used in this study and sample was comprised of 120 students and 40 students were taken from each school i.e. SOE, HSS and SOS. It consist of both male and female students.

### **Data Collection Tools**

In this study, Academic Stress Scale constructed by Rajendran & Kaliappan (1990) was used. For the Academic Performance, Students Semester grade point (SGPA) in the semester examination was considered.

The scale was originally developed by Kimin 1970. Later it was adopted by Rajendran & Kaliappan in 1990. The academic stress scale was consist of 40 items. There was five options for each item, ranging from "No stress" to "Extreme Stress." Each option



is assigned a score of 0, 1, 2, 3, 4 respectively. The scale was classified into five categories and each categories comprised of 8 items. The reliability coefficient was calculated using test-retest method and found to be 0.82.

### Statistical Techniques Used in this Study

- Relation between the academic stress &academic performance among university students was calculated by Pearson product-moment correlation.
- To compare academic stress between boys and

girls among university studentst- test was used.

 ANOVA was used to compare the academic stress in terms of different schools i.e. SOE, HSS & SOS

#### Results

**Objective No. 1** To find out the influence of academic stress on academic performance of University students.

 $H_01$ = There is no significant difference between academic stress & academic performance of university students.

Table 1 Correlations between Academic Stress & Academic Performance

			<b>Academic Performance</b>	Academic Stress	
Pearson Correlation	Academic Performance	Correlation Coefficient	1	.138	
		Sig. (2-tailed)		.132	
		N	120	120	
	Academic Stress	Correlation Coefficient	.138	1	
		Sig. (2-tailed)	.132		
		N	120	120	
**. Correlation is significant at the 0.05 level (2-tailed).					

Table-1 depicts that there is a positive correlation between academic stress and academic performance. The coefficient of correlation is .138 with p-value .132 which is significant at .05 level. Hence, it indicates that academic stress has influence on academic performance of university students.

Objective No.2: To compare the academic stress of university students in respective of their gender.

H<sub>0</sub>2 There is no significant difference in academic stress among university students in respect to their gender.

Table 2 The t-test Results of Academic Stress among University Students in Respect to their Gender

	Gender	Z	Mean	S.D.	JÞ	t(stat)	t(tab)
l	Male	60	78.07	28.68	118	-0.27	1 66
F	emale	60	79.85	40.9	110		1.66

<sup>\*\*</sup>Significant at 0.05 level

It is evident that the calculated value of 't" for comparing academic stress among boys and girls university students was found -0.27 at 0.05 level of significance for degree of freedom, df=118,because the calculated t value(-0.27) is less than the table t value (1.98). Hence, the hypothesis "there is no significant difference between boys and girls of academic stress among university students was accepted.

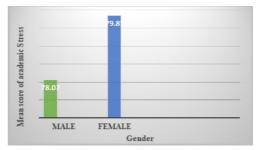


Figure 1 Graph Showing the Difference of Mean Score of Academic Stress based on their Gender i.e. Male & Female

Objective No.3 To compare the academic stress of University students in respect to their schools.

H<sub>0</sub>3 There is no significant difference in academic stress among University students in respect to their school.

Table 3 Mean and Variance among SOS, HSS and SOE Academic Achievement Scores

Groups	Count	Sum	Average	Variance	
HSS	40	2961	74.025	620.1276	
SOS	40	3379	84.475	1569.794	
SOE	40	3135	78.375	1530.958	

Table 4 Comparison of SOS, HSS and SOE Academic Stress Mean Scores - One Way ANOVA

Source of Variation	ss	df	MS	F- value	P- value
Between Groups	2204.467	2	1102.233	0.89	0.41395
Within Groups	145114.3	117	1240.293		
Total	147318.8	119			

Table 4 depicts that the F-value (0.89) after comparing the academic stress of university students in respect to their schools i.e. HSS, SOS & SOE. The calculated 'F' value is 0.89 which is less than the table value i.e. 3.16 at 0.05 level of significance with df being (variable) v1=2 and v2=117. We may therefore, conclude that the difference in academic stress of university level students in respect to their schools is insignificant and is just a matter of chance.

Therefore, the H03 stating that there is a no significant difference in academic stress among university students in respect to their school. Thus, the formulated null hypothesis gets accepted.

### Discussion

The present study was aimed to study the influence of academic stress on academic performance of university students in terms of gender and different schools i.e. SOE, HSS & SOS. The following discussions are made on the basis of the objectives. The finding of first objective reveals that there is a positive correlation between academic stress & academic performance. The coefficient of correlation is .138 with p-value .132 which is significant at .05 levels. This indicates that academic stress has influence on academic performance of university students. It is supported by the study conducted by Mehfooz. Q et. al (2017) on effect of stress on academic performance of undergraduate

medical students. The findings revealed that there is a relation between stress and academic performance; they are inversely correlated.

The second objective reveals that there is no significant difference between the mean scores of boys and girls academic stress among university students. It can be said there is only apparent differences between the boys and girls mean scores. The calculated t value (-0.27) is less than the table t value (1.98). Therefore, it can be clearly comprehend that there is no significant difference between the boys and girls in academic stress among University students. It is supported by the previous research conducted by Khan. M.J et. al (2018) on effect of perceived academic stress on students performance in relation to gender. The results found that there is no significant difference between boys and girls in academic stress because both male and female students are concerned and consistent in their study habits and studies.

The third objective of the findings tells that there is no significant difference in academic stress among university students in respect to their school. The calculated value of F is 0.89 which is less than the table value of 3.16 at 0.05 levels. It is showed that all the three schools have equal academic stress among Post graduate students.

#### Conclusion

Stress is a state of nervousness and anxiety. All students in his academic life interacts with different kinds of stress. Students have to perform different roles in the present socio cultural and economic scenario of the society, which causes extreme stress among the students. From this research, it can be seen that both male and female university students have same academic stress. Academic stress of university students between boys and girls have no difference. Moreover, it can also be said that there is a positive correlation between academic stress and academic performance.

## **Suggestion for Further Research**

 The present study conducted only with University students. This study can be carried out by covering all the higher secondary and college students.



- Academic stress & academic performance can be compared between under-graduate and post graduate students.
- 3. This study can also be conducted to compare rural- urban students of different schools.
- 4. The Present study has taken into account students of Tezpur University only. Future studies may be conducted on other geographical areas.
- 5. In this study, 120post graduate students from three different schools are taken as a sample and simple random technique has been used. The size of the sample can be increased and other sampling techniques can be used for the further study.

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