The Academic Stress and Academic Performance of Students in 24 Middle Schools in the North Region

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"There is more to life than increasing its speed." – Mahatma Gandhi

Abstract: *Academic stress is the psychological distress associated with some of the expected frustrations associated with academic failure or not being aware of the possibility of such failure. 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. This research paper aims to investigate the relationship between academic stress, and academic achievement of secondary school students of north 24 pgns. district of west Bengal. Three hypotheses were formed accordingly to the objectives on present study. Present investigator had adopted the descriptive survey method and quantitative study in nature. The population for the present study was considered as the school students of class tenth grade of north twenty four parganas district. A total of 200 samples of ten grade was selected through the simple random sampling technique. A self-developed questionnaire on Academic Stress had administered on students of tenth grade at secondary level for the purpose of collection of data and scores on academic achievement was collects their previous year final examination marks. It is revealed from the study academic stress of male students are not significantly different from the female students at secondary level and also the academic stress of urban students are not significantly different from the rural students at secondary level of north twenty parganas district. The present study also shows positive and strong correlation between academic stress and academic achievement of secondary school students. These findings have practical implications for parents, teachers, educational planners, and of course for students.*

Keywords: Stress, Academic Stress, Achievement, Education, Secondary School

1. Introduction

In today's increasingly competitive educational landscape, the academic achievement of secondary school students has gained significant attention. Factors influencing academic success are multifaceted and complex, with numerous studies focusing on the interplay between various variables. Two critical factors that have emerged as key influencers in student performance are stress and motivation. Understanding the relationship between stress, motivation, and academic achievement can shed light on effective strategies for enhancing student outcomes and well-being. 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. Stress and its manifestations, such as depression and anxiety have always been seen as a common problem among people in different professions and occupations. Academic Stress may hamper the academic performance of the students and may affect their career and the overall life. The impact of stress on students' academic performance has been widely recognized. Academic stress is associated with negative psychological consequences such as unpleasant emotional states, depression, tearfulness, even self-harm, and suicidal feelings in some cases (e.g., Lotz and Sparfeldt, 2017; Soares and Woods, 2020). According to Sahu, Pandey and Jha (2016) "Academic stress is anything that inflicted an additional demand on an individual's capability to cope". The pressure to excel academically, coupled with social expectations, personal demands, and high stakes assessments, can contribute to increased stress levels among secondary school students. Chronic stress has been found to impair cognitive functioning, memory retention, and overall academic performance. Consequently, investigating the relationship between academic stress and academic achievement is crucial for developing interventions that promote student success. This research paper aims to investigate the relationship between academic stress, and academic achievement of secondary school students of north 24 pgns. district of west Bengal. By analyzing existing literature and employing descriptive research methods, investigator examined the impact of academic stress on students' subsequent academic performance. Additionally, also explored potential strategies to mitigate stress and enhance motivation, ultimately seeking to provide evidence-based recommendations for educators, policymakers, and stakeholders in promoting student well-being and academic success. The causes of academic stress can be classified mainly into seven categories i.e. the stress due to teachers, stress due to exams and test, stress due to peer, stress due to parental and social, stress due to time management and

infrastructure. These can arise from different school-based sources of stress, such as school work, discipline and classroom management procedure, extracurricular activities, and public performance.
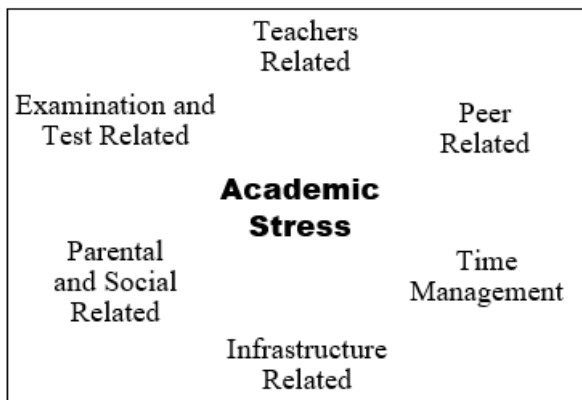

Figure 1.1: Factors Involving in Academic Stress

Academic Achievement can be defined as what a student does or achieve at school, college or university, in class in laboratory, library or project work. Academic Achievement is commonly measured by examination or continuous assessment. "Achievement is an art of achieving result gained by efforts, the quality and quantity of student's work." (Merriam Webster's Collegiate Dictionary 2001). The academic achievement of secondary school students is influenced by various factors, including academic stress and achievement motivation. Understanding the relationship between these variables is essential for developing effective interventions and strategies to enhance student outcomes.

2. Rationale of The Study

In present study the researcher has chosen a researchable problem to focus on academic stress and academic achievement of secondary level students of north twenty-four pgns. district. Academic stress is a crucial problem of a student life in the present scenario. Our education system has loaded the students with a variety of pressures such as vast curriculum, examination fear; neck-to-neck competitions etc. peer and parental pressure add tons to their problem. As Academic Stress have greater influence on Academic Achievement it is felt important to study them between the secondary level schools students. Hence the present study aims to find out the relationship between Academic Stress and Academic Achievement of secondary school students of north 24 pgns. district of west bengal and also the influence of academic stress on academic achievement of secondary school students. No doubt, man has progressed tremendously and has been able to accomplish his desires but in this race of advancement, has fallen into the clutches of many ailments, some of which are of his own creation. Keeping in view, investigator has under taken the research problem related to academic stress. Hence the researcher opted this study to find out better solutions, provide guidance and plan strategies for teachers, parents and students in order to help them cope with academic stress.

3. Review of Related Literature

Narad, N.K., Diwan, S. (2018), Conducted a study on

Impact of Stress on Academic Achievement of Higher Secondary School Students. The major objective of the present study was to study the impact of high and low stress on the academic achievement of higher secondary school students and to study the impact of high and average stress on the academic achievement of higher secondary school students. On the basis of objective, the present investigator framed the null hypothesis. 30 higher secondary schools were selected through deliberate random sampling technique of which 250 boys and 250 girls were taken randomly as the sample of the present study. ADSS tool by Pallavi Bhatnagar is used to calculate the depression among the students and for academic achievement their previous years. Both two null hypotheses were rejected. It has been found that there is significant mean difference in the academic achievement of higher secondary school students having high, average and low stress hence the students with less stress will able to score better.

Gobena, G.A. (2024). Conducted a study on Effects of Academic Stress on Students' Academic Achievements and Its Implications for Their Future lives. The main objectives of the study was Identify the effect of academic stress on students' academic achievements (SAA) and assess the effect of academic stress on students' academic achievements in their daily lives. A correlational research design was employed through stratified random sampling (A total of 270 sample size, where 80 female and 190 male students) to collect pertinent data through a questionnaire. Descriptive and inferential statistics were employed. This section of the paper mainly dealt with the quantitative data analysis of the study. To conclude, academic stress hinders good academic achievement, increases college dropout rates, low graduation rates, and lack of self-confidence. It leads to drinking alcohol absenteeism, chewing khat, reduced academic morale of students, and failure in completing assignments on time.

4. Objectives of the Study

In the present study the researcher had formulated some objectives:

O[1]: To find out the differences between academic stress of secondary level students of north 24 pgns district in respect to their gender.

O[2]: To find out the differences between academic stress of secondary level students of north 24 pgns district in respect to their location.

O[3]: To find out the relationship between academic stress and academic achievement of secondary level school students of north 24 pgns district.

5. Methodology of the Study

a) **Design of The Study:** The present study was done through the descriptive survey method and quantitative in nature.

b) **Population:** The population for the present study was considered as the school students of grade X studying in different Govt. aided schools at North 24 Parganas district

in West Bengal.

c) **Sample & Sampling Technique:** 04 Govt. aided high schools were randomly selected of which 2 were rural & 2 urban schools. A total of 200 samples of ten grade was selected through the simple random sampling technique. The sampling design represents in the following figure;

Table 5.1: Details of Total Sample for the Present Investigation

	Rural	Urban	Total
Boys	57	46	103
Girls	45	52	97
Total	102	98	300

d) **Tools & Techniques:** The investigator has decided to construct and standardized a scale to measure the Academic Stress of secondary school students. The researcher has followed Likert's method of summated ratings to develop this scale. At first, a total of twenty nine items under four dimension was drafted for the scale. The draft was presented to three experts (for the sake of content validity) in the field of social science research. Some of the items had deleted from the draft and finally, twenty six items were included in the final tool. Out of these, eighteen were positive items & eight were negative items. Each statement is set against a three-point scale of Always, Sometimes, Never and weightage of 3, 2, 1 were given in that order for the favorable statements (Positive Statements) and the scoring was reversed for unfavorable statements, (Negative Statements) i.e. 1, 2, 3.

In the present study researcher had to measure the academic achievement of the students in this connection the present investigator had requested to school authorities to provide the tenth grade final examination result of the respective students. Finally the scores of the final examination result as considered the data of academic achievement to the target sample group.

e) **Hypothesis:** On the basis of formulated objectives of the study the present researcher had formed some hypothesis in null form which are as follows**;**

H01: There is no significant difference in academic stress between male and female secondary school students of north 24 pgns district

H02: There is no significant difference in academic stress between urban and rural secondary school students of north 24 pgns district

H03: There is no significant relationship between social media addiction and academic achievement of secondary school students.

6. Data Analysis and Result

In the present study the researcher analyzed each objectives through the testing of null hypotheses. The analysis results were given below:

H_01: There is no significant difference in academic stress between male and female secondary school students of north 24 pgns district.

To test the null hypothesis (H_01) present researcher followed descriptive and inferential statistics through IBM SPSS Software, the result were given below;

Table 6.1: Descriptive & Inferential Statistics on Academic Stress on the bases of gender

Scale	Gender	N	Mean	Standard Deviation	t-value	df	Sig. (two tailed)
Academic Stress Scale	Male	103	53.285	12.157	1.842*	198	.067
	Female	97	52.845	13.872			

(* Not significant at 0.05 level of significance)

From the analysis in 6.1, it is seen that academic stress of secondary school students of north 24 pgns between male and female the calculated 't' [(198)] value is 1.842 and p-value is .067 (p>0.05). Hence 't'[(198)] value is not significant at 0.05 level of significance so null hypothesis (H_01) is not rejected. It can be safely said that academic stress of male students are not significantly different from the female students at secondary level of north twenty parganas district. Male students possess more academic stress than that of female students at secondary level of north twenty four parganas.

H_02: There is no significant difference in academic stress between urban and rural secondary school students of north 24 pgns district.

To test the null hypothesis (H_01) present researcher followed descriptive and inferential statistics through IBM SPSS Software, the result were given below;

Table 6.2: Descriptive & Inferential Statistics on Academic Stress on the bases of location

Scale	Location	N	Mean	Standard Deviation	t-value	df	Sig. (two tailed)
Academic Stress Scale	Urban	98	54.487	13.421	1.986**	198	.0491
	Rural	102	52.041	14.247			

(** Significant at 0.05 level of significance)

From the analysis in 6.2, it is seen that academic stress of secondary school students of north 24 pgns between urban and rural the calculated 't' [(198)] value is 1.986 and p-value is .0491 (p<0.05). Hence 't'[(198)] value is significant at 0.05 level of significance so null hypothesis (H_01) is rejected. It can be safely said that academic stress of urban students are not significantly different from the rural students at secondary level of north twenty parganas district. Urban students possess more academic stress than that of rural students at secondary level of north twenty four parganas.

H₀3: There is no significant relationship between social media addiction and academic achievement of secondary school students.

To test the null hypothesis (H03) present researcher followed Pearson Correlation through IBM SPSS Software, the result were given below;

Table 6.3: Correlation between Social Media Addiction and Academic Achievement

Variables	'r'-value	Nature of Correlation	p-value
Academic Stress	0.621	Positive & Strong Correlation	0
Academic Achievement			

The above table 6.3 shows that Academic Stress and Academic Achievement are positively correlated which means if academic stress increases than the academic achievement may increases. The p-value of academic stress and academic achievement is .0000 which is lesser than the significant value of 0.01 level. (p= 0.000<0.01). So the null hypothesis (H03) is rejected. It can be said from the result that there is significant relationship between the academic stress and academic achievement.
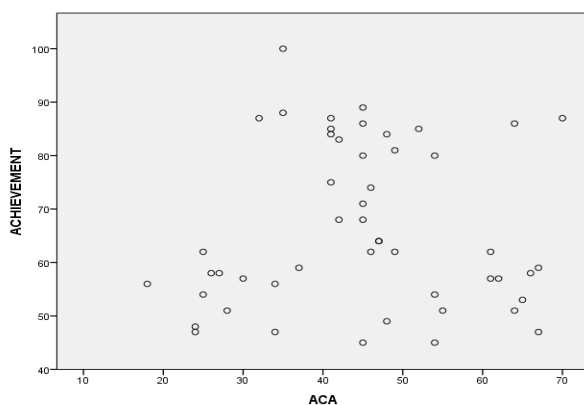
Achievement

Figure 6.1: Scatter Plot depicting Positive and Significant linear correlation between Academic Stress & Academic

7. Conclusion

The present study is of greater importance in recent time because we are living in a modern and globalize era. A concrete conclusion is an indispensable part of a strong research. It is an essential task that helps to compile the study in a single thread for understanding the results easily. Academic stress of male students are not significantly different from the female students at secondary level and also the academic stress of urban students are not significantly different from the rural students at secondary level of north twenty parganas district. Positive thinking relaxation and by setting realistic goals the student can cope with their stress. Teachers should also help students in building self-esteem in them. The present study also shows positive and strong correlation between academic stress and academic achievement of secondary school students. These findings have practical implications for parents, teachers, educational planners, and of course for students. Students can rest assured that there is a positive relationship between academic

stress and academic achievement. Teachers can understand that academic stress has a positive impact on a students' academic achievement and stress does not always correlate with academic achievement negatively.

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