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STRESS AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN SENAPATI DISTRICT MANIPUR

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ABSTRACT

Stress is commonly defined as a holistic transaction between the individual and a stressor, resulting in the body's mobilization of a stress response. Students face numerous stressors daily, including challenges in adjusting to campus life which often starkly contrast with their home environments. The study focused on finding out the level of stress present in the secondary school students in Senapati district Manipur with regards to gender, class and school variation. The study further delves into finding out the relationship between stress and academic achievement status of the young learners. To fulfill the objectives a total of 200 secondary school students were selected from different schools in the Senapati district through stratified random sampling techniques. A standardised tool was employed in this study, researchers also collected various demographic data of the participants through the information sheet. The performances in the last annual examinations were taken to represent the participants' academic achievement. Descriptive methods of research were employed in the study. Researchers employed descriptive and inferential statistical techniques to interpret the data collected meaningfully. The study found that maximum of the total students (42.5%) experiences an average level of stress, 30% above average level of high stress, 27.5% experiencing below average level of stress and 12% experience high level of stress respectively. When examining stress across gender, female students show slightly higher level of stress than males. Despite this pattern, the statistical analysis showed no significant difference in stress levels between female and male students. Similarly, while Class X students have slightly more students in high stress group than Class XI, the difference was not statistically meaningful. The study reveals that there is almost no correlation between academic achievement and stress.

Keywords: Academic Achievement, Education, Manipur, Secondary Students, Stress

1. INTRODUCTION

Selye (1956) stated that it's not stress that kills us, it is our reaction to it. Stress is commonly defined as a holistic transaction between the individual and a stressor, resulting in the body's mobilization of a stress response. Academic stress, in particular, arises during the course of educational activities and stems from academic-related demands weighed against the individual's adaptive resources. Students face numerous stressors daily, including challenges in adjusting to campus life which often starkly contrasts with their home environments. The greater the life

changes an individual experiences, the more stress they endure, increasing the likelihood of illness and disease.

Potential academic stressors include overwhelming workloads, overcrowded lecture rooms, harsh economic conditions hindering access to basic needs, and the persistent drive to excel academically against all odds. Aafreen et al. (2018) assert that in today's highly competitive academic environment, student performance is impacted by various factors, such as social media, educational quality, family dynamics, and social bonds. Students are continually pressured from multiple sources throughout their academic journey, ultimately leading to stress. Stress and its effects are pervasive phenomena that affect individuals across age groups, gender identities, socioeconomic strata, political affiliations, ethnic backgrounds, religious beliefs, and careers.

In tertiary institutions especially, students grapple with stress that can directly affect their academic performance Greenberg (1999). The impact of stress can be either positive or negative. When harnessed positively, stress may serve as a powerful motivator for enhanced quality of life. Conversely, stress becomes destructive when perceived and internalized negatively Vuai (2021). To enable the young generation of this nation to lead appositive and impactful lives, it is essential to provide life skills training Meitei and Maisnam (2024).

2. NEED OF THE STUDY

Secondary school represents a pivotal phase in a student's academic and personal development. During this period, students face increasing academic demands and psychosocial challenges that can trigger significant stress. Academic stress, if left unaddressed, can adversely affect students' performance, motivation, and overall mental well-being.

Given this, the present study is of considerable importance, particularly in identifying stress-related challenges specific to secondary school students. The findings can inform the design and implementation of targeted interventions by educators, parents, and policymakers. Tailored programs aimed at reducing academic stress can contribute to improved academic outcomes and foster a more supportive and productive learning environment.

3. REVIEW OF LITERATURE

In today's highly competitive world, students face a range of academic challenges, including exam-related stress, disinterest in attending classes, and difficulty understanding subject matter. Academic stress is a major source of pressure among adolescents and can lead to low self-esteem. Numerous psychological issues, such as depression and suicide, are often linked to low self-esteem Nikitha et al. (2014). Studies have also found that higher secondary students experience elevated levels of stress, resulting in health problems and poor academic performance. These findings underscore the urgent need for regular counselling and targeted interventions to reduce stress Dutta and Dewri (2022), Miyeba and Friday (2022), Das (2024). Contributing factors to adolescent stress include disrupted family dynamics, peer pressure, inability to cope with academic demands, drug abuse, and lack of competence. A supportive and stimulating environment has been shown to be essential for students to thrive academically and achieve their goals Rao and Preethi (2012), Ghatol (2017), Choudhuri and Mishra (2024).

4. OBJECTIVES OF THE STUDY

The objectives of the study are:

1) To find out the level of Stress present among the Secondary School Students in Senapati District Manipur.
2) To find out whether there is a difference in stress levels among the secondary school students with respect to gender variation.
3) To find out whether there is a difference in stress among the secondary school students with regards to the difference of class.
4) To find out whether there is a difference in stress levels among the secondary school students with regards to school variation.
5) To find out the relationship between stress and academic achievement of the students.

5. RESEARCH HYPOTHESES

The hypotheses of the study are as follows:

1) There is a notable variance in stress levels among the secondary school students in Senapati District, Manipur, with respect to gender variation.
2) There is a significant difference in stress levels among the secondary school students with regards to class variation.
3) There is a notable variance in stress levels among higher secondary school students based on school variation.
4) A positive correlation exists between stress levels and academic achievement of higher secondary school students.

6. MATERIALS AND METHODS

- **Sample and Sampling Technique:** To fulfill the objectives of this study, a total of 200 secondary school students were selected from different schools in the Senapati district. The stratified random sampling technique was employed in selecting the sample.
- **Measures:** A student's stress scale designed and standardized by Dr. Zaki Akhtar was employed in this study to measure the level of stress. The researchers also collected various demographic data of the participants through the information sheet. Name of the participants, class, gender and academic achievement in the last annual examination. The performances in the last annual examinations were taken to represent the participants' academic achievement. The instrument contained 51 items having five areas of stress. The stress score obtained by the students are converted into z score as per the instruction of the scale and Cronbach's alpha score was .77.
- **Data Analysis:** Researchers employed various statistical techniques to interpret the data collected meaningfully. Frequency distribution, mean, t test, ANOVA, Correlation were employed to analyse the data.

7. RESULTS

Table 1

Table 1 Level of Stress Present Among the Students

Level of Stress	Frequency	Percent
Extremely High	1	0.5%
High	23	11.5%
Above Average	36	18%
Average	85	42.5%
Below Average	31	15.5%
Low	17	8.5%
Extremely Low	7	3.5%
Total	200	100%

As per the objective to find out the level of stress present among secondary school students in Senapati District, Manipur, the data in the Table 1 shows that only one student (0.5%) felt extremely high stress, and 23 students (11.5%) said their stress was high. Thirty-six students (18%) reported above-average stress, while 85 students (42.5%) felt an average amount of stress. On the lower end, 31 students (15.5%) had below-average stress, 17 students (8.5%) had low stress, and 7 students (3.5%) had extremely low stress. Nearly half the students feel average stress, about 30% feel more stress than average, and around 27.5% feel less stress. The 12% in the high and extremely high categories may benefit from extra support to manage their stress better.

Table 2

Table 2 Level of Stress with Regards to Gender.

Level of Stress	Gender		Total
	Female	Male	
Extremely High	1	0	1
High	15	8	23
Above Average	19	17	36
Average	42	43	85
Below Average	10	21	31
Low	11	6	17
Extremely Low	2	5	7
Total	100	100	200

The data in the Table 2 shows that most students, both male (43) and female (42), fall under the “Average” stress level. In the higher stress categories “High” and “Above Average” females (15 and 19 respectively) outnumber males (8 and 17), and only females report “Extremely High” stress (1). This suggests that more girls experience elevated stress. In the lower stress categories “Below “Average,” “Low,” and “Extremely Low” males are more represented. For example, 21 males are in the “Below Average” group compared to 10 females, and 5 males report “Extremely Low” stress against 2 females. This indicates that female students tend to experience higher stress levels, while male students are more often found in the lower stress range.

Table 3

Table 3 Stress and Gender Variation.

Gender	N	Mean	Std. Deviation	t	Sig.
Female	100	0.12	0.99	1.764	.923
Male	100	-0.12	1		

Table 3 presents the comparison of stress levels between male and female secondary school students. The mean stress score for female students is 0.12, while for male students it is -0.12, with nearly identical standard deviations (0.99 for females and 1 for males), indicating similar variability in both groups. Although the mean score is slightly higher for females, the t-value of 1.764 and the significance level (p = 0.923) indicate that this difference is not statistically significant. Since the p-value is much greater than 0.05, it can conclude that there is no meaningful difference in stress levels between male and female students based on this analysis. So, the hypothesis that there is a notable difference in stress levels between boys and girls is not supported by the data. In simple terms, both boys and girls in Senapati District experience stress at similar levels.

Table 4

Table 4 Stress Regards to the Difference of Class.

Level of Stress	Class		Total
	IX	X	
Extremely High	0	1	1
High	9	14	23
Above Average	22	14	36
Average	42	43	85
Below Average	18	13	31
Low	4	13	17
Extremely Low	5	2	7
Total	100	100	200

Table 4 compares stress levels between Class IX and X students, with 100 students each. Most students in both classes fall under the "Average" stress level (42 in Class IX, 43 in Class X). Class X has more students with "High" and "Extremely High" stress, while Class IX has more in the "Above Average" and "Extremely Low" categories. Class IX also shows a wider spread across both high and low stress levels, while Class X leans more toward higher stress. Overall, Class X students show slightly higher stress levels than those in Class IX.

Table 5

Table 5 Stress Regards to the Difference of Class.

Class	N	Mean	Std. Deviation	t	Sig.
IX	100	-0.01	0.95	-0.20	0.51
X	100	0.01	1.05		

To find out if there is a difference in stress levels between Class IX and Class X students, a t-test was done using data from 100 students in each class as shown in Table 5 The average (mean) stress score for Class IX students was -0.01, while for

Class X students it was 0.01. Both classes had similar spreads in their scores (standard deviations of 0.95 and 1.05). The difference in average stress between the two classes is very small. The t-test result was -0.20, and the significance value (p-value) was 0.51, which is higher than the usual cut-off of 0.05. This means the small difference in stress levels between the two classes is likely due to chance. Therefore, the hypothesis that there is a significant difference in stress levels between Class IX and X students is not supported. In simple words, students of both classes experience stress at about the same level.

Table 6

Table 6 Stress Levels with Regards to School Variation.

School	N	Mean	Std. Deviation	F	Sig.
Auxilium School, Senapati	48	0.34	0.84		
Avant Grade Academy, Senapati	50	0.27	0.84		
Mave School, Senapati	47	-0.31	1.11	6.43	0.00
Mt. Everest Higher Secondary School, Senapati	55	-0.28	1.02		
Total	200	0.00	1		

To find out if stress levels differ among students from different schools, a test called ANOVA was used to compare the average stress scores of students from four schools in Senapati: Auxilium, Avant Grade Academy, Mave School, and Mt. Everest Higher Secondary School, shown in Table 6. The results show that students from Auxilium (mean = 0.34) and Avant Grade (mean = 0.27) had higher average stress scores, while students from Mave School (-0.31) and Mt. Everest School (-0.28) had lower scores. The F-value is 6.43, and the significance value (p = 0.00) is less than 0.05, which means the difference is statistically significant. In simple terms, this means that the level of stress does vary meaningfully from school to school. So, the hypothesis that there is a notable difference in stress levels based on the school students attend is supported by the data.

Table 7

Table 7 Relationship Between Stress and Academic Achievement

Stress	Academic Achievement	Sig. (2-tailed)
Pearson Correlation	.004	.952

To find out if there is a relationship between stress and academic achievement among higher secondary school students, a correlation test was done as illustrated in Table 7. The result shows a very small correlation value of 0.004, which means there is almost no connection between the two. The significance value (p = 0.952) is much higher than 0.05, which tells us that this result is not meaningful and could have happened by chance. In simple words, this means that students' stress levels do not appear to affect their academic achievement, and the hypothesis that there is a positive relationship between the two is not supported by the data.

8. DISCUSSION AND CONCLUSION

The study findings show the level of stress experienced by the students at secondary school in Senapati district Manipur. Data shows that maximum of the total students (42.5%) experience an average level of stress, 30% of the students experiencing above- average level of high stress and 27.5% of the students are experiencing below average level of stress. This shows that while stress is a common

experience among students, as per the data revealed by the study it can be stated that most of it falls within manageable levels. Though, the 12% of students who experience high level of stress may require further support from parents, teachers, relatives, peer groups, or counsellors to manage their emotional well-being.

When examining stress across gender, female students show slightly higher level of stress than males. Despite this pattern, the statistical analysis showed no significant difference in stress levels between female and male students, signifying that gender is not a major factor of stress variation in the present study. Similarly, while Class X students have slightly more students in high stress group than Class XI, the difference was not statistical meaningful. This result also suggest that academic level does not significantly affect students' stress level.

On the other hand, statistically significant was observed while comparing the different schools shows different level of stress resulting from above average and low level of stress. This result indicates that several factors within the individual schools such as environment, academic pressure, peer group, or teaching methods may influence more than gender or class level.

Lastly, the study investigated whether stress was related to the academic achievement of the students. The study reveals that almost no correlation between the academic achievement and stress. There is no connection between academic achievement and stress, where more stress did not certainly perform better or worse academically. The findings of this study reject the common belief that stress may positively or negatively in their academic performance.

9. CONFLICT OF INTEREST

The authors declare no conflicts of interest regarding this manuscript.

10. FUNDING SOURCE

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CONFLICT OF INTERESTS

None.

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