

# Effect of Stress on Academic Performance of School Students: An Empirical Study

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**Abstract :** Academic stress has emerged as a significant concern in the lives of school students due to increasing academic demands, intense competition, parental expectations, and societal pressures. The present empirical study investigates the relationship between academic stress and the academic performance of secondary school students. A quantitative descriptive survey design was employed, and data were collected from 120 students using a standardized Academic Stress Scale. Academic performance was assessed through students' percentage of marks in their previous annual examinations. Statistical techniques such as mean, standard deviation, Pearson's correlation, and simple linear regression were applied for data analysis. The findings revealed a significant negative relationship between academic stress and academic performance. The study emphasizes the importance of implementing effective stress management strategies within schools to enhance students' psychological well-being and academic success.

**Keywords:** *Academic Stress, Academic Performance, School Students, Mental Health, Secondary Education*

## INTRODUCTION

Education is a cornerstone of individual and societal development, shaping students' intellectual, emotional, and social competencies. In the contemporary educational environment, students are increasingly exposed to various stressors, including academic workload, competitive examinations, parental expectations, and peer pressure. These stressors often lead to academic stress, which can significantly influence students' learning outcomes and overall well-being.

Stress is defined as a psychological and physiological response to perceived challenges or demands (Selye, 1956). Lazarus and Folkman (1984) further conceptualized stress through the transactional model, emphasizing the role of cognitive appraisal and coping mechanisms. While moderate stress, often termed eustress, can motivate students to perform better, excessive stress or distress can impair concentration, memory, and decision-making abilities, ultimately affecting academic performance.

Given the rising prevalence of stress among school students, it is essential to empirically examine its impact on academic achievement to inform educational policies and interventions.

## REVIEW OF RELATED LITERATURE

### Concept of Stress

Selye (1956) introduced the concept of stress as the body's non-specific response to any demand. Lazarus and Folkman (1984) expanded this understanding through the transactional model, emphasizing the interaction between individuals and their environment in determining stress levels.

### Academic Stress among School Students

Deb, Strodl, and Sun (2015) reported that Indian high school students experience substantial academic stress due to parental expectations and examination pressure. Similarly, Pascoe, Hetrick, and Parker (2020) found that academic stress negatively influences students' psychological well-being and educational outcomes.

### Stress and Academic Performance

Putwain (2007) highlighted examination anxiety as a significant predictor of poor academic achievement. Research consistently demonstrates a negative correlation between high stress levels and students' academic performance, indicating the need for supportive educational environments.

### Research Gap

Although several studies have examined academic stress, limited empirical research has focused on secondary school students within the Indian context using standardized measurement tools and statistical analyses. The present study aims to bridge this gap.

## OBJECTIVES OF THE STUDY

- To identify the major sources of academic stress among school students.
- To examine the relationship between academic stress and academic performance.
- To assess the predictive impact of academic stress on students' academic achievement.
- To suggest strategies for managing academic stress in schools.

## HYPOTHESES

H<sub>0</sub> (Null Hypothesis): There is no significant relationship between academic stress and academic performance of school students.

H<sub>1</sub> (Alternative Hypothesis): There is a significant negative relationship between academic stress and academic performance of school students.

## RESEARCH METHODOLOGY

### Research Design

The study employed a quantitative descriptive survey design to investigate the relationship between academic stress and academic performance.

### Population and Sample

- Population: Secondary school students.
- Sample Size: 120 students from various secondary schools.
- Sampling Technique: Simple random sampling to ensure representativeness.

### Tools of Data Collection

#### Academic Stress Scale:

- A standardized instrument measuring dimensions such as examination stress, parental pressure, peer competition, and time management.
- Reliability: Cronbach's alpha = 0.82, indicating high internal consistency.
- Validity: Content validity ensured through expert review.

#### Academic Performance:

- Measured using the percentage of marks obtained in the previous annual examination.

### Procedure

Permission was obtained from school authorities prior to data collection. Participants were informed about the purpose of the study, and informed consent was secured. Questionnaires were administered in classroom settings, ensuring confidentiality and anonymity.

### Ethical Considerations

- Participation was voluntary.
- Confidentiality and anonymity of respondents were maintained.
- Data were used solely for academic purposes.
- The study adhered to ethical standards of educational research.

### Statistical Techniques

- Mean and Standard Deviation
- Pearson's Correlation Coefficient
- Simple Linear Regression
- t-test (if required)

## DATA ANALYSIS AND INTERPRETATION

**Table 1: Descriptive Statistics of Study Variables**

Variable	Mean	Standard Deviation
Academic Stress	68.45	10.32
Academic Performance	72.18	8.76

**Interpretation:** The results indicate moderate levels of academic stress among students and an average academic performance.

**Table 2: Correlation between Academic Stress and Academic Performance**

Variables	r-value	Significance
Academic Stress & Academic Performance	-0.52	$p < 0.01$

**Interpretation:** The negative correlation suggests that higher stress levels are associated with lower academic performance.

**Table 3: Regression Analysis Predicting Academic Performance**

Predictor	$\beta$	t-value	Significance
Academic Stress	-0.48	-6.12	$p < 0.01$

**Interpretation:** Academic stress significantly predicts students' academic performance, explaining a substantial portion of the variance.

## MAJOR FINDINGS

- Examination pressure and parental expectations are the primary sources of academic stress.
- A significant negative relationship exists between academic stress and academic performance.
- High stress levels lead to decreased concentration, motivation, and academic achievement.
- Academic stress significantly predicts students' academic performance.
- Stress management interventions can improve students' academic outcomes.

## DISCUSSION

The findings of the present study corroborate earlier research indicating that excessive academic stress adversely affects students' academic performance. Consistent with Deb et al. (2015) and Pascoe et al. (2020), the study demonstrates that stress interferes with cognitive processes such as attention and memory. The transactional model of stress (Lazarus & Folkman, 1984) provides a theoretical framework for understanding how students' appraisal of academic demands influences their coping responses and academic outcomes.

## EDUCATIONAL IMPLICATIONS

- Establishment of school counselling services to support students' mental health.
- Adoption of student-centered teaching methodologies.
- Integration of life skills and stress management programs into the curriculum.
- Parental awareness programs to reduce unrealistic expectations.
- Encouragement of co-curricular activities such as yoga, meditation, and sports.

## LIMITATIONS OF THE STUDY

- The study was limited to a sample of 120 students.
- Data were collected from a specific geographical area, limiting generalizability.
- Academic performance was measured solely through examination scores.
- Self-reported data may involve response bias.

## SUGGESTIONS FOR FUTURE RESEARCH

- Comparative studies between urban and rural students.
- Longitudinal studies to examine stress over time.
- Experimental research on stress management interventions.
- Inclusion of additional variables such as socio-economic status, gender, and school environment.

## CONCLUSION

The study concludes that academic stress is a significant determinant of the academic performance of school students. While moderate stress may act as a motivating factor, excessive stress adversely affects students' cognitive and emotional functioning, leading to poorer academic outcomes. Collaborative efforts by educators, parents, and policymakers are essential to create supportive educational environments that foster both academic excellence and psychological well-being.

## CONFLICT OF INTEREST

The author declares no conflict of interest related to this study.

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