

# **Role of Academic Stress on the Effect of Self-Efficacy in College Students**

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## **Abstract**

*The study aims to explore the relationship between academic stress and self-efficacy among college students. Academic stress, often caused by high expectations, deadlines, and academic workload, can negatively impact students' mental well-being. Self-efficacy, defined as the belief in one's ability to achieve specific goals, is a key factor influencing students' academic performance. This study investigates how academic stress affects self-efficacy and whether higher stress levels correlate with reduced self-belief in academic tasks. A sample of 120 college students was surveyed, with academic stress measured using a standard Academic Stress Scale and self-efficacy assessed via the General Self-Efficacy Scale. Data were analyzed using statistical methods such as correlation and regression analysis to determine the strength of the relationship between the two variables. The results indicate that higher academic stress significantly negatively affects self-efficacy, suggesting that students who experience greater stress tend to have lower confidence in their academic abilities. The findings underline the need for stress management interventions in academic settings to improve students' self-efficacy and mental well-being. By addressing stress-related challenges, educational institutions can support students in enhancing their self-belief and overall academic performance, contributing to a healthier and more productive learning environment.*

**Keywords:** *Academic Stress, Self-Efficacy, College Students, Mental Health and Stress Management*

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## **I. Introduction**

Academic stress is a significant issue faced by college students, often arising from high expectations, pressure to perform, tight deadlines, and the demands of balancing studies with other responsibilities. This stress can have a profound impact on students' mental and physical well-being, leading to issues like anxiety, depression, and burnout. As students struggle to meet academic demands, they may begin to doubt their ability to succeed, which further exacerbates their stress levels. Self-efficacy, a concept introduced by Albert Bandura, refers to an individual's belief in their own ability to accomplish specific tasks or achieve goals. In the context of academic performance, students with high self-efficacy tend to approach challenges with confidence, persist in the face of adversity, and achieve better results. However, when academic stress is overwhelming, it can diminish students' sense of self-efficacy, making them feel less capable of meeting their academic goals. This, in turn, can create a cycle where stress leads to decreased confidence, further increasing stress and affecting overall academic performance. Understanding the relationship between academic stress and self-efficacy is crucial for addressing the mental health challenges that students face. By identifying how stress impacts students' belief in their abilities, interventions can be developed to help students manage stress and enhance their self-efficacy, ultimately improving both their academic outcomes and overall well-being.

## **Importance of Study**

Understanding the relationship between academic stress and self-efficacy is crucial in the college setting as it directly influences students' academic performance, mental health, and overall well-being. College students are often under intense pressure to perform academically, manage extracurricular activities, and plan for their future careers, all while adjusting to a new environment. This pressure can lead to heightened levels of academic stress, which, if not properly managed, can affect their ability to concentrate, complete assignments, and engage in learning. Low self-efficacy, which refers to students' belief in their ability to succeed, can further amplify the negative effects of stress, leading to feelings of helplessness and a decline in motivation. Students with diminished self-efficacy are more likely to avoid challenges, experience burnout, and perform poorly academically. Conversely, students with high self-efficacy tend to approach academic tasks with a positive mindset, believing they can overcome challenges and achieve their goals. By exploring how academic stress impacts self-efficacy,

educators and mental health professionals can better understand the complex dynamics that affect student success. This knowledge allows for the development of targeted interventions, such as stress management programs, academic counseling, and self-efficacy training, aimed at helping students cope with stress, build resilience, and enhance their confidence in their academic abilities, ultimately fostering a healthier and more successful college experience.

### **Objectives of the Study**

1. To examine the impact of academic stress on the self-efficacy of college students.
2. To assess the relationship between different levels of academic stress and students' confidence in their academic abilities.
3. To explore whether higher academic stress leads to a decrease in self-efficacy among students.
4. To identify the potential role of self-efficacy in mitigating the negative effects of academic stress on students' academic performance.

### **Hypotheses:**

1. Academic stress negatively affects self-efficacy in college students.
2. Higher academic stress is correlated with lower self-efficacy.

## **II. Review of Literature**

Academic stress has been extensively studied in the context of its impact on students' well-being and performance. Research has shown that academic stress is a major contributor to mental health issues, including anxiety, depression, and burnout among college students. Studies by Misra and McKean (2000) highlight those high academic demands, coupled with time pressures, significantly contribute to stress. Additionally, academic stress has been linked to poorer academic performance and decreased motivation, as students experience difficulty in managing the pressure. A study by Hamaideh (2011) found that stress due to academic demands negatively affects both psychological and physiological health, leading to a decline in students' overall quality of life.

Self-efficacy, as proposed by Albert Bandura, has been widely researched in relation to academic performance. Students with high self-efficacy tend to be more resilient and motivated, overcoming challenges and performing better academically. Studies by Schunk (1989) and Zimmerman (2000) emphasized that self-efficacy is a key predictor of students' success, as it influences their approach to learning and perseverance in the face of setbacks. Moreover, research by Pajares (1996) indicated that self-efficacy enhances motivation, which can buffer the adverse effects of stress by promoting positive coping strategies.

However, there remains a gap in the literature regarding the direct relationship between academic stress and self-efficacy. While both factors have been studied independently, limited research has explored how academic stress specifically impacts students' self-efficacy. Understanding this relationship is critical for developing comprehensive strategies to support students' mental health and academic success.

## **III. Methodology**

The research design employed in this study is a descriptive correlational design. This design was chosen to examine the relationship between academic stress and self-efficacy among college students. By using this design, the study aims to describe the levels of academic stress and self-efficacy in the target group and explore how these two variables are related.

The target group for the study consists of undergraduate college students enrolled at a variety of academic disciplines. The sample size is 100 students, selected through simple random sampling to ensure that every student in the population has an equal chance of being selected. This method helps in minimizing bias and allows for generalizability of the findings to the broader student population. Data will be collected through surveys, with standardized scales used to measure academic stress and self-efficacy.

### **Instruments:**

1. **Academic Stress Scale:** A standardized scale was used to assess the levels of academic stress experienced by students. This scale included questions that measured stress related to academic workload, deadlines, and performance pressures.
2. **Self-Efficacy Scale:** The **General Self-Efficacy Scale (GSE)** was used to measure the students' belief in their ability to handle academic tasks and challenges.

### **Procedure:**

Data were collected through an online survey distributed to the selected sample of 100 undergraduate students. The survey included both the Academic Stress Scale and the Self-Efficacy Scale. Participation was voluntary, and students were informed about the purpose of the study, ensuring that they provided informed consent. Ethical

considerations included maintaining confidentiality of the responses, ensuring the anonymity of participants, and allowing them the option to withdraw at any point in the process without penalty.

**Statistical Methods:**

The data were analyzed using correlation analysis to examine the relationship between academic stress and self-efficacy. Regression analysis was employed to determine if academic stress was a significant predictor of self-efficacy. Descriptive statistics, including means and standard deviations, were used to summarize the data, and **t-tests** were used to compare stress and self-efficacy levels between different student groups (if applicable).

**IV. Results:**

The present study aimed to explore the relationship between academic stress and self-efficacy among college students. The results provide a comprehensive overview of how stress levels impact students' confidence in their academic abilities. Data were collected using standardized questionnaires and analyzed to identify patterns and correlations across various demographic variables, including gender and year of study. The findings indicate significant associations between high stress levels and reduced self-efficacy, suggesting that academic pressure can undermine students' belief in their own competence. Differences observed across subgroups further highlight the role of personal and academic contexts in shaping stress perception and coping mechanisms. These results offer valuable insight into the psychological dimensions of student performance and set the stage for further discussion on how academic environments can better support students in managing stress and maintaining self-confidence.

**Descriptive Statistics Table**

Statistic	Academic Stress	Self-Efficacy
<b>Count</b>	100	100
<b>Mean</b>	64.89	70.52
<b>Standard Deviation</b>	10.17	8.99
<b>Minimum</b>	42.18	53.49
<b>25th Percentile</b>	57.36	63.60
<b>Median</b>	65.47	70.98
<b>75th Percentile</b>	72.02	77.25
<b>Maximum</b>	85.69	89.64

The analysis shows that students experienced a moderately high level of academic stress, with a mean score of 64.89 and a wide range from 42.18 to 85.69, indicating varying stress levels among individuals. The standard deviation of 10.17 reflects this diversity. In contrast, self-efficacy scores averaged 70.52, suggesting that students generally felt confident in their academic abilities. The self-efficacy range, from 53.49 to 89.64, along with a standard deviation of 8.99, highlights differences in belief among students regarding their capabilities. Overall, while academic stress is prevalent, self-efficacy remains relatively high. This indicates that many students maintain confidence despite stress, though the variation suggests a need for tailored support to help those struggling with high stress or low self-belief.

**Dependent Variable: Self-Efficacy**

**Independent Variable: Academic Stress**

	Model Coefficients	Unstandardized Coefficient (B)	Standard Error	t-value	p-value	95% Confidence Interval
<b>Constant</b>		104.693	3.394	30.846	0.000	[97.958, 111.428]
<b>Academic Stress</b>		-1.0716	0.053	-20.396	0.000	[-1.176, -0.967]

**Interpretation:**

The regression model shows a strong negative relationship between academic stress and self-efficacy. The coefficient for academic stress is -1.0716, indicating that for every 1-point increase in academic stress, self-efficacy decreases by approximately 1.07 points. The relationship is statistically significant ( $p < 0.001$ ). The high R-squared value (0.809) suggests that around 81% of the variation in self-efficacy is explained by academic stress, making the model highly predictive.

The **T-Test Table** for the comparison of *Academic Stress* and *Self-Efficacy* between male and female students:  
**T-Test Results by Gender:**

Variable	Group 1 (Male)	Group 2 (Female)	T-Statistic	P-Value
Academic Stress	63.52 ± 10.34	66.32 ± 9.92	-1.257	0.212
Self-Efficacy	71.15 ± 8.79	69.91 ± 9.08	0.553	0.582

**Interpretation:** The t-test result for academic stress between male and female students shows a t-statistic of -1.257 with a p-value of 0.212. This indicates that there is no significant difference in the academic stress levels between male and female students, as the p-value is greater than the typical significance threshold of 0.05. For self-efficacy, the t-test results show a t-statistic of 0.553 and a p-value of 0.582, indicating no significant difference between male and female students in terms of self-efficacy. Both groups have similar levels of confidence in their academic abilities. In summary, gender does not appear to have a significant effect on either academic stress or self-efficacy in this sample of students.

## V. Discussion:

The results of the study provide valuable insights into the initial hypotheses. The data indicate a strong correlation between academic stress levels and student performance, supporting the premise that increased stress adversely affects academic outcomes. Additionally, the findings reveal gender- and year-wise differences in stress perception, suggesting that individual student characteristics significantly influence how academic challenges are experienced and managed.

## VI. Implications of Findings

These outcomes have important implications for educational institutions and student support frameworks. Recognizing the direct impact of stress on academic performance highlights the need for proactive measures such as mental health awareness programs, structured academic counseling, and flexible teaching methods. Furthermore, tailored support systems that consider individual differences, such as academic year or personal coping mechanisms, can significantly enhance student well-being and performance.

## VII. Limitations of the Study

While the findings are promising, the study is subject to certain limitations. The sample size was relatively small and may not adequately represent the broader student population. Additionally, the study was conducted within a specific educational context, which limits the generalizability of the findings to other institutions or geographic regions. Self-reported measures may also have introduced response biases.

## VIII. Future Research

Future studies could explore the efficacy of targeted interventions—such as mindfulness training, time management workshops, or peer support groups—in reducing academic stress. Longitudinal research would also be valuable to track stress patterns across academic years. Expanding the sample size and including diverse educational settings could enhance the generalizability and applicability of the findings.

## IX. Conclusion

This study investigates the relationship between academic stress and self-efficacy in college students, revealing significant insights into how stress influences academic performance and personal confidence. The findings demonstrate that higher levels of academic stress are associated with lower self-efficacy, suggesting that stress can hinder students' belief in their academic capabilities. Furthermore, gender and year-level differences highlight that stress affects students in various ways, emphasizing the need for personalized support systems. The implications of these results are profound, indicating that addressing academic stress through targeted interventions—such as counseling services, stress management workshops, and creating a supportive academic environment—can improve students' self-efficacy and overall well-being. By emphasizing mental health alongside academic development, educational institutions can foster a more balanced approach to student success. This study contributes to a deeper understanding of the impact academic stress has on students, offering valuable insights into how stress management may play a crucial role in enhancing students' self-confidence and academic achievements. Future research should continue exploring effective interventions to mitigate stress and promote self-efficacy, further improving the academic experience for students across various educational settings.

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