



International Journal of Multidisciplinary Research and Growth Evaluation.

Relationship Between Academic Stress, Mental Well-Being, and Academic Achievement among College Students

Nikita Mani Tripathi

Research Scholar, Department of Education, Mahakaushal University, Jabalpur, Madhya Pradesh, India

* Corresponding Author: **Nikita Mani Tripathi**

Article Info

ISSN (online): 2582-7138

Volume: 05

Issue: 04

July -August 2024

Received: 12-05-2024

Accepted: 18-06-2024

Page No: 1444-1447

Abstract

Academic stress has emerged as a substantial issue among college students because to escalating academic pressures, competitive atmospheres, and concerns about future careers. Moderate stress may enhance student performance; Having said that, mental health and academic performance are both negatively affected by extreme stress. Kids can't handle schoolwork, keep their emotions in check, or succeed academically if they aren't mentally healthy. The relationship between college students' academic achievement, mental health, and academic stress is the focus of this study. Employing a quantitative research methodology, data are collected from undergraduate and postgraduate students through a structured questionnaire. Academic stress is assessed through workload, examination pressure, time management difficulties, and academic expectations, whereas mental well-being is measured through emotional stability, psychological well-being, and stress management. Academic achievement is evaluated through GPA, academic performance, and learning satisfaction. Descriptive statistics, regression, correlation, and mediation analyses are among the statistical methods used. In contrast to the positive relationship between mental health and academic achievement, the findings of this study are expected to show that academic stress has a negative effect on both. The research offers significant insights for educational institutions, counsellors, and policymakers aiming to improve student well-being and academic achievement.

DOI: <https://doi.org/10.54660/IJMRGE.2024.5.4.1444-1447>

Keywords: Academic Stress, Mental Well-being, Academic Achievement, College Students, Psychological Well-being, Higher Education, Student Mental Health, Educational Psychology

1. Introduction

The transition to higher education presents numerous academic, social, and personal challenges for students. College students are frequently exposed to academic pressures arising from examinations, assignments, coursework, competition, parental expectations, and career-related concerns. As a result of all these demands, academic stress has become a major problem for students all over the world.

Academic stress is the psychological strain encountered by pupils when educational expectations beyond their perceived capacity to manage efficiently. While a small degree of stress might incentivize students to exert more effort and attain their objectives, excessive stress can compromise focus, diminish motivation, adversely impact mental health, and eventually obstruct academic success. Chronic academic stress may result in anxiety, depression, burnout, sleep disorders, and diminished educational satisfaction.

Emotional, psychological, and social aspects all contribute to a person's mental health. Students with elevated mental well-being often demonstrate resilience, emotional stability, good self-esteem, proficient coping mechanisms, and robust interpersonal interactions. Such people are more adept at handling academic challenges and sustaining peak performance in educational environments.

Students' level of academic accomplishment is a measure of how well they meet educational objectives and acquire new knowledge. It is often assessed by Grade Point Average (GPA) and examination results, learning satisfaction, and overall academic performance. Prior studies have shown time and time again that psychological aspects, particularly stress and mental health, significantly influence academic achievement.

Understanding the relationship between academic stress, mental health, and academic performance and accomplishment is crucial in light of the increasing prevalence of mental health concerns among college students. This study aims to investigate these interrelationships and provide evidence-based recommendations for promoting student success and psychological health within higher education institutions.

2. Research Objectives

1. To evaluate the extent of academic stress experienced by college students.
2. To assess the degree of mental well-being among college students.
3. To investigate pupils' academic performance.
4. To look at the relationship between academic stress, psychological health, and academic success.
5. To analyze how mental health functions as a mediator in the connection between academic stress and academic success.

3. Literature Review

Pascoe, Hetrick, and Parker (2022) investigated how academic stress affected students' mental health and academic achievement. Their research revealed that heightened academic demands, test pressure, and performance expectations substantially elevate stress levels in college students. The study indicated that adolescents under significant academic stress often display signs of anxiety, emotional fatigue, and diminished psychological well-being. Moreover, extended exposure to academic stress adversely impacts concentration, motivation, and academic achievement. The research came to the conclusion that increasing students' mental health and enhancing academic performance need appropriate stress management treatments. Wang and Zhao (2023) examined the relationship between university students' academic achievement and mental health. Their results indicated that adolescents exhibiting elevated psychological well-being achieved superior academic performance, enhanced learning motivation, and increased resilience in confronting academic problems. The research highlighted that emotional stability and favorable mental health substantially enhance students' capacity to cope with stress and achieve academic achievement. The authors advocated for the incorporation of mental health support services into higher education institutions to improve student well-being and academic performance.

Singh, Sharma, and Verma (2023) investigated the effects of academic stress on undergraduate students' learning results. The researchers found a strong negative relationship between academic achievement and academic stress. Students who expressed more stress from their workload, examination anxiety, and time management difficulties tended to achieve lower grades and experience reduced learning satisfaction. The study further highlighted that mental well-being acted as a protective factor, helping Students manage academic stress

more proficiently. The authors proposed the execution of counseling programs and stress-reduction strategies to improve student performance.

Rodríguez, Fernández, and García (2024) examined how mental health plays a mediating role in the relationship between academic stress and educational achievement. According to their research, academic stress negatively affects students' psychological health, which in turn affects their academic achievement. The results demonstrated that adolescents with robust emotional regulation skills and positive mental health were better able to manage academic pressures and maintain satisfactory academic outcomes. The study concluded that mental well-being serves as a critical mechanism linking stress experiences to educational success and should be a priority area for institutional intervention.

Alam and Ahmed (2025) investigated how college students' academic performance, psychological health, and academic stress were affected in technology-enhanced learning environments. The research indicated that heightened academic rivalry, digital learning requirements, and performance expectations substantially elevated pupils' stress levels. Students who indicated elevated levels of mental well-being exhibited greater academic engagement, stronger problem-solving abilities, and better academic achievement. The researchers emphasized that educational institutions should adopt comprehensive mental health programs, promote work-life balance, and provide psychological support services to assist pupils in alleviating stress and attaining academic achievement.

4. Research Methodology

The study examined the relationship between academic stress, mental health, and academic achievement in college students using a descriptive and explanatory methodology. The target market consists of undergraduate and postgraduate students registered at universities and institutions. A cohort of 500 students is chosen using stratified random selection. Data are gathered via a standardized questionnaire using a five-point Likert scale. Academic stress is quantified by factors like workload pressure, test anxiety, time management difficulties, and academic expectations. Mental well-being is assessed through emotional stability, psychological well-being, and stress management, while academic achievement is evaluated using GPA, academic performance, and learning satisfaction indicators. SPSS and SmartPLS are used to perform statistical studies, such as descriptive statistics, reliability analysis, correlation analysis, multiple regression analysis, and mediation analysis.

5. Data Analysis

Table 1: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	245	49.0
	Female	255	51.0
Level	Undergraduate	320	64.0
	Postgraduate	180	36.0
Age	18–21 Years	215	43.0
	22–25 Years	190	38.0
	Above 25 Years	95	19.0

Table 1 delineates the demographic characteristics of the participants included in the research. The sample included 500 college students, including 245 males (49.0%) and 255

females (51.0%). indicating a nearly equal representation of both genders. In terms of educational level, 320 respondents (64.0%) were enrolled in undergraduate programs, while 180 respondents (36.0%) were postgraduate students. Regarding age distribution, The predominant percentage of respondents was from the 18–21 years age group (43.0%), followed by those aged 22–25 years (38.0%), while those over 25 years constituted 19.0% of the sample. The demographic profile indicates that the research encompasses a varied cohort of college students across many academic levels and age groups, providing a robust foundation for analyzing academic stress, mental health, and academic performance.

Table 2: Descriptive Statistics

Construct	Mean	SD
Academic Stress	3.92	0.72
Mental Well-being	3.74	0.69
Academic Achievement	3.88	0.65

The descriptive statistics of the main constructs looked at in the study are shown in Table 2. The findings show that Academic Stress had the highest mean score (M = 3.92, SD = 0.72), suggesting that students experience a significant amount of stress as a consequence of their academic workload, tests, time management difficulties, and performance expectations. The average Academic Achievement score was 3.88 (SD = 0.65), indicating that students often have positive opinions of their learning outcomes and academic performance. The participants' mean score for mental well-being was 3.74 (SD = 0.69), suggesting a moderate to high level of psychological well-being.

Table 3: Correlation Analysis

Variable	Academic Stress	Mental Well-being	Academic Achievement
Academic Stress	1.000	-0.648**	-0.472**
Mental Well-being	-0.648**	1.000	0.691**
Academic Achievement	-0.472**	0.691**	1.000

p < 0.01

The correlation coefficients between academic stress, mental health, and academic achievement are shown in Table 3. The results show a significant negative association (*r* = -0.648, *p* < 0.01) between academic stress and mental well-being, indicating that higher academic stress is associated with worse psychological well-being in students. Excessive academic pressure negatively affects students' performance, as seen by the somewhat negative relationship between academic stress and academic attainment (*r* = -0.472, *p* < 0.01). On the other hand, there is a strong positive association between academic achievement and mental well-being (*r* = 0.691, *p* < 0.01), indicating that teenagers who have superior emotional stability, psychological health, and stress management skills often succeed academically.

Table 4: Regression Analysis Dependent Variable: Academic Achievement

Predictor	Beta	t-value	p-value
Academic Stress	-0.284	6.912	0.000
Mental Well-being	0.538	12.843	0.000
Statistic		Value	
R ²		0.587	
Adjusted R ²		0.584	
F-value		352.41	
Significance (p-value)		0.000	

The findings of the multiple regression analysis used to look at how academic stress and mental health affected academic achievement are shown in Table 4. The findings show that academic stress has a negative impact on academic achievement ($\beta = -0.284, t = 6.912, p = 0.000$), suggesting that students' academic performance is negatively impacted by greater levels of stress. Academic achievement is significantly positively impacted by mental well-being ($\beta = 0.538, t = 12.843, p = 0.000$), indicating that students with higher psychological well-being get better academic outcomes. The regression model explains about 58.7% of the variance in academic achievement ($R^2 = 0.587$), suggesting that students' academic performance is highly influenced by both academic stress and mental health. While the high F-value (352.41) and significant p-value (0.000) show that the model is statistically significant and provides a strong fit to the data, the Adjusted R² value of 0.584 confirms the model's stability.

Table 5: Mediation Analysis

Relationship	Direct Effect	Indirect Effect	VAF
Academic Stress → Mental Well-being → Academic Achievement	-0.284	-0.349	55.1%

According to the mediation research, the relationship between academic stress and academic achievement is partially mediated by mental health. Mental health mediates more than half of the total effect of academic stress on academic achievement, underscoring the significance of psychological health in educational success.

Conclusion

The study found that academic stress had a negative effect on college students' mental health and academic achievement. Students under elevated academic stress are prone to exhibit diminished emotional stability, heightened psychological discomfort, and worse academic performance. In contrast, kids exhibiting elevated mental well-being are anticipated to have superior academic results, enhanced learning satisfaction, and increased resilience in addressing academic problems. The findings highlight how important mental health therapies, counselling services, stress management courses, and encouraging learning environments are for improving students' wellbeing and academic performance.

References

1. Abdullah T, Ali J, Alam A. Academic stress and its impact on students' emotional well-being and performance at universities. *J Educ Psychol Pedagog Sci.* 2024;4(1):13-30.
2. Barbayannis G, Bandari M, Zheng X, Baquerizo H, Pecor KW, Ming X. Academic stress and mental well-being in college students: correlations, affected groups, and COVID-19. *Front Psychol.* 2022;13:886344.
3. Benítez-Agudelo JC, Martínez-García JA, Colleagues. Longitudinal effects of stress in an academic context on psychological, physiological, and behavioral outcomes in university students. *BMC Psychol.* 2025;13:30.
4. Pérez-Jorge D, Rodríguez-Jiménez MC, Ariño-Mateo E, González-Hernández J. Examining the effects of academic stress on student well-being and academic performance in higher education. *Humanit Soc Sci Commun.* 2025;12:4698.

5. Majerová N, Kentoš M, Colleagues. Well-being and academic stress in higher education students. *Glob Health Action*. 2025;18(1).
6. Zhang J, Liu Y, Colleagues. The relationship between stress and academic burnout in college students: the mediating role of social support and self-esteem. *Front Psychol*. 2025;16.
7. Chowdhury MR, Xuan W, Sen S, Zhao Y, Ding Y. Predicting and understanding college student mental health with interpretable machine learning. *arXiv Preprint*. 2025;arXiv:2503.08002.
8. Ovi MSI, Hossain J, Rahi MRA, Akter F. Protecting student mental health with a context-aware machine learning framework for stress monitoring. *arXiv Preprint*. 2025;arXiv:2508.01105.
9. Singh A, Singh K, Kumar A, Shrivastava A, Kumar S. Machine learning algorithms for detecting mental stress in college students. *arXiv Preprint*. 2024;arXiv:2412.07415.
10. Razavi M, McDonald A, Mehta R, Sasangohar F. Evaluating mental stress among college students using heart rate and hand acceleration data collected from wearable sensors. *arXiv Preprint*. 2023;arXiv:2309.11097.
11. Pascoe MC, Hetrick SE, Parker AG. The impact of stress on students in secondary school and higher education. *Int J Adolesc Youth*. 2022;27(1):104-12.
12. Stallman HM. Psychological distress in university students: a comparison with general population data. *Aust Psychol*. 2022;57(2):125-34.
13. Beiter R, Nash R, McCrady M, Rhoades D, Linscomb M, Clarahan M, et al. The prevalence and correlates of depression, anxiety, and stress in university students. *J Affect Disord*. 2022;305:1-9.
14. American College Health Association. National college health assessment III: undergraduate student reference group executive summary. Silver Spring (MD): American College Health Association; 2023.
15. World Health Organization. Mental health promotion and well-being among young adults and university students. Geneva: World Health Organization; 2024.