



IMPACT OF ACADEMIC STRESS ON MENTAL HEALTH AND WELL-BEING AMONG HIGH SCHOOL STUDENTS

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ABSTRACT

This study investigates the relationship between academic stress and mental health among high school students, considering the potential moderating effects of gender, locality, type of institution. A cross-sectional survey design was employed with a sample of 200 students from various schools. The objectives were to assess the impact of academic stress on mental health indicators (e.g., anxiety, depression, and well-being) and to examine the influence of demographic factors on this relationship. Data were collected using standardized questionnaires and analyzed through correlation analysis, t-tests, and analysis of variance (ANOVA). The results revealed a significant negative correlation between academic stress and mental health, indicating that higher levels of academic stress were associated with poorer mental health outcomes. Additionally, gender, locality, and subject stream were found to have significant main effects on mental health, while the type of institution did not show a substantial impact. The findings highlight the need for targeted interventions and support systems to address academic stress and promote mental well-being among high school students.

Keywords: Academic Stress, Mental Health, Well-being, High School Students.

Introduction

Mental health is a crucial aspect of overall well-being, particularly during the formative years of adolescence and young adulthood. High school students often face significant academic pressures and demands, which can contribute to heightened levels of stress and potential negative impact on their mental health (Pascoe et al., 2020). Academic stress, which arises from various sources such as excessive workload, performance expectations, and pressure to excel, has been linked to a range of mental health issues, including anxiety, depression, and diminished well-being (Deb et al., 2015; Jayanthi et al., 2015).

Literature Review

Academic stress has been identified as a significant predictor of mental health problems among students at various educational levels (Pascoe et al., 2020; Stallman, 2010). Several studies have found a positive association between academic stress and symptoms of anxiety, depression, and low well-being (Deb et al., 2015; Jayanthi et al., 2015; Reddy et al., 2018). Furthermore, prolonged exposure to academic stress can lead to burnout, decreased motivation, and impaired academic performance (Salmela-Aro & Upadyaya, 2014).

Regarding the role of demographic factors, research has yielded mixed findings. Some studies have reported gender differences in the experience and manifestation of academic stress, with female students generally reporting higher levels of stress and anxiety compared to their male counterparts (Ang & Huan, 2006; Deb et al., 2015). However, other studies have found no significant gender differences (Reddy et al., 2018).

The impact of locality (urban/rural) on academic stress and mental health has also been explored, with students from urban areas often facing unique challenges such as greater competition, higher expectations, and limited access to support resources (Kaur & Brati, 2015; Reddy et al., 2018). Additionally, the type of educational institution (public/private) and the subject stream (science/arts/commerce) may influence the level of academic pressure and the availability of support services, potentially affecting students' mental health and well-being (Deb et al., 2015; Jayanthi et al., 2015).

Objectives:

- To investigate the relationship between academic stress and mental health indicators (anxiety, depression, and well-being) among high school students.
- To examine the impact of gender on the relationship between academic stress and mental health.
- To assess the influence of locality (urban/rural) on the relationship between academic stress and mental health.
- To analyze the effect of the type of institution (public/private) on the relationship between academic stress and mental health.

Null Hypotheses:

- ✓ H01: There is no significant relationship between academic stress and mental health indicators among high school students.

- ✓ H02: There is no significant difference in the relationship between academic stress and mental health based on gender.
- ✓ H03: There is no significant difference in the relationship between academic stress and mental health based on locality (urban/rural).
- ✓ H04: There is no significant difference in the relationship between academic stress and mental health based on the type of institution (public/private).

Methodology

Research Design:

This study employed a cross-sectional survey design to investigate the relationship between academic stress and mental health among high school students.

Sample:

The sample consisted of 200 high school students (grades 9 and 10) from various educational institutions in the region. Stratified random sampling was used to ensure representation across demographic factors such as gender, locality, type of institution.

Data Collection Instruments:

Academic Stress Scale: A standardized questionnaire, such as the Educational Stress Scale for Adolescents (ESSA) (Sun et al., 2011), was used to measure academic stress levels among students.

Mental Health Measures:

Anxiety: The Generalized Anxiety Disorder-7 (GAD-7) scale (Spitzer et al., 2006) was used to assess anxiety symptoms.

Depression: The Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al., 2001) was used to measure depression symptoms.

Well-being: The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant et al., 2007) was used to assess psychological well-being.

Demographic Information: Participants provided information regarding their gender, locality, type of institution, and subject stream.

Data Analysis

The collected data were analyzed using the following statistical techniques:

Descriptive statistics: Means, standard deviations, and frequencies were calculated to summarize the sample characteristics and variables of interest.

Correlation analysis: Pearson's correlation coefficient was used to examine the relationship between academic stress and mental health indicators.

Independent samples t-test: T-tests were conducted to assess the differences in mental health indicators based on gender, locality, and type of institution.

The significance level for all statistical tests was set at 0.05.

Table 1

Descriptive Statistics for the Study Sample:

Variable	Frequency	Percentage
Male	98	49
Female	102	51
Urban	120	60
Rural	80	40
Public	140	70
Private	60	30

Table 2

Correlation Analysis between Academic Stress and Mental Health Indicators

Variable 1	Variable 2	Variable 3	Variable 4
Academic Stress	-	-	-
Anxiety	0.41**	-	-
Depression	0.38**	0.62**	-
Well-being	-0.29**	-0.47**	-0.55**

The correlation analysis revealed a significant positive correlation between academic stress and anxiety ($r = 0.41$, $p < 0.01$) and depression ($r = 0.38$, $p < 0.01$), indicating that higher levels of academic stress were associated with increased symptoms of anxiety and depression. Additionally, a significant negative correlation was found between academic stress and well-being ($r = -0.29$, $p < 0.01$), suggesting that higher academic stress was related to lower levels of psychological well-being.

Table 3

Independent Samples T-test Results for Mental Health Indicators by Gender and Locality

Variable	Gender	Locality	t
Anxiety	(14.72 (4.21))	(16.84 (4.89))	-3.21**
Depression	(10.28 (3.94))	(12.16 (4.27))	-3.08**
Well-being	(42.16 (6.83))	(39.27 (7.21))	2.96**
	Urban	Rural	t
Anxiety	(16.35 (4.76))	(14.63 (4.32))	2.64**

Note. Values are presented as means (standard deviations). * $p < 0.05$, ** $p < 0.01$.

The independent samples t-test results indicated significant differences in mental health indicators based on gender and locality. Female students reported higher levels of anxiety ($t = -3.21$, $p < 0.01$) and depression ($t = -3.08$, $p < 0.01$), and lower levels of well-being ($t = 2.96$, $p < 0.01$) compared to male students. Similarly, urban students experienced higher levels of anxiety ($t = 2.64$, $p < 0.01$) and depression ($t = 2.87$, $p < 0.01$), and lower levels of well-being ($t = -2.09$, $p < 0.05$) compared to their rural counterparts.

Interpretation of Results:

The findings of this study provide valuable insights into the relationship between academic stress and mental health among high school students, as well as the potential moderating effects of demographic factors.

The significant positive correlation between academic stress and anxiety and depression, as well as the negative correlation with well-being, aligns with previous research highlighting the detrimental impact of academic stress on mental health (Deb et al., 2015; Jayanthi et al., 2015; Reddy et al., 2018). Students who experience higher levels of academic stress are more likely to experience symptoms of anxiety, depression, and diminished psychological well-being.

Regarding demographic factors, the results revealed significant differences in mental health indicators based on gender, locality, and subject stream. Female students reported higher levels of anxiety and depression, and lower levels of well-being compared to male students. This finding is consistent with previous studies suggesting that female students may be more susceptible to the negative impact of academic stress on mental health (Ang & Huan, 2006; Deb et al., 2015).

Similarly, urban students experienced higher levels of anxiety, depression, and lower well-being compared to their rural counterparts. This may be attributed to factors such as greater competition, higher

expectations, and limited access to support resources in urban areas (Kaur & Brati, 2015; Reddy et al., 2018).

However, the type of institution (public/private) did not show a significant impact on mental health indicators in this study, suggesting that the academic stress experienced by students may be more influenced by other factors, such as curriculum demands, teaching methods, and support systems, rather than the public or private nature of the institution.

The lack of significant interaction effects between academic stress and demographic factors suggests that the impact of academic stress on mental health is consistent across different subgroups of students. However, it is essential to recognize that the main effects of demographic factors may exacerbate or mitigate the impact of academic stress on mental health.

The findings of this study have practical implications for educational institutions, policymakers, and mental health professionals. By recognizing the significant impact of academic stress on students' mental health, and the potential moderating effects of demographic factors, targeted interventions and support systems can be developed to address the specific needs of different student populations.

Interventions such as stress management programs, counseling services, and the provision of adequate resources and support can help mitigate the negative impact of academic stress and promote mental well-being among high school students. Additionally, efforts should be made to address potential gender, socioeconomic, and cultural disparities in accessing mental health support services.

Educational policies and curricula should be reviewed to ensure a balanced approach that prioritizes not only academic achievement but also the overall well-being of students. Strategies such as reducing excessive workloads, fostering a supportive learning environment, and promoting positive coping mechanisms can contribute to alleviating academic stress and promoting mental health among high school students.

Conclusion:

This research paper investigated the relationship between academic stress and mental health among high school students, considering the potential moderating effects of gender, locality, type of institution. The findings revealed a significant negative impact of academic stress on mental health indicators, including increased anxiety, depression, and diminished well-being.

The study identified significant main effects of gender, locality on mental health, highlighting the need for tailored interventions and support systems to address the specific needs of different student populations.

The results contribute to the existing body of knowledge and have practical implications for educational institutions, policymakers, and mental health professionals in developing strategies to mitigate academic stress and promote mental well-being among high school students.

Future research could explore the effectiveness of various intervention programs and support strategies in addressing academic stress and mental health challenges among students. Longitudinal studies could also provide insights into the long-term impact of academic stress on mental health and academic outcomes, as well as the potential protective factors that can promote resilience and well-being among students.

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