

The Relationship between Academic Stress and Mental Health Issues among Adolescents

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Abstract

Background: Academic stress is a prevalent issue among adolescents due to rising academic pressures, competition and societal pressures. Academic stress can have a detrimental effect on the psychological health of adolescents, resulting in psychological distress, anxiety and depressive symptoms. **Objective:** Adolescents are a key focus of this research, as this study seeks to explore the association between academic stress, mental health problems and the impact of stress on psychological well-being. **Methodology:** A cross-sectional study design was used with adolescents 13-19 years old. An anonymous questionnaire measuring academic stress, anxiety, depression and coping strategies was administered. Data were analysed to determine relationships between the stress and mental health. **Findings:** Academic stress is positively related to mental health issues. Young people with higher academic stress reported higher levels of anxiety symptoms (60%) and depression (45%) than those with lower reported levels of academic stress. Further, maladaptive coping was associated with more severe mental health problems. **Conclusion:** The take home message is that stress around academics has a large impact on adolescents' mental health, highlighting the importance of developing stress coping strategies and creating a healthy learning environment. Parents and educators need to support a healthy work-academic balance and promote mental health support to enhance adolescents' well-being.

Keywords: Academic stress, adolescents, mental health, anxiety, depression, coping strategies, student well-being

1 Introduction

The adolescent years are a pivotal time of transition in physical, emotional and cognitive development. At this time, there are increased cognitive, social and even professional demands that can lead to increased stress. Academic stress is a mental distress response to educational demands beyond the individual's coping abilities [1]. Academic stress is a serious public health problem in recent years because of its link with mental health problems in adolescents. There has been an increased focus on academic performance and competitive exams, driven by increasingly high parental expectations, creating a higher level of pressure on students worldwide [4]. Research has shown that exams, workload, time constraints and fear of failure are among the stressors students face [2]. While stress can motivate and boost academic performance, excessive academic stress can trigger a range of adverse psychological effects, such as anxiety, depression, mood instability and burnout [3]. Globally, mental health problems among youths are on the rise, particularly anxiety and depression [6]. Recent studies have shown that almost one in five adolescents suffer from a mental health disorder, one of the primary causes of which is academic stress [4]. Academic stress and mental health is a complicated interaction between multiple elements including the individual's coping, social support and resilience [5]. Young people with inadequate coping strategies are at higher risk of psychological issues related to stress [6]. Also, socio-cultural factors are significant in academic stress. In several developing countries such as India, education is associated with social status and future prospects, adding to the stress levels [7]. The other factor is the emergence of online mediums of education and the pandemic (COVID-19) which have added other types of academic stress such as loneliness, reduced peer contact, and screen time [8]. This has contributed to the mental health problems of adolescents. Although the research literature has referred to the impact of academic stress on mental health, there is a need to understand how academic stress impacts mental health directly in specific settings and on specific populations. A number of these studies tend to have regional or limited variable focus and therefore, research is needed to integrate a range of variables to include behaviour, psychology and environment [9]. Thus the present study is designed to investigate the link between academic stress and mental health problems faced by adolescents.

1.1 Objectives

- a. To determine the academic stress level of adolescents.
- b. To explore the relationship between academic stress and mental health (anxiety and depression).

1.2 Research Gap

While prior research has identified the association between academic stress and mental health, there is little research on the inter-relationships between the behavioural, socio-cultural and environmental factors that may influence this association in a variety of adolescent populations. The aim of this study is to offer a more holistic perspective.

2 Literature review

The recent literature identifies an increasing concern about the detrimental effects of academic stress on the mental health of adolescents, especially in the context of the growing educational demands, and the rise of online learning. Academia has been shown to be a significant source of stress, leading to anxiety, depression and burnout in adolescents [10]. Digital learning has also exacerbated stress because of lacking social contact and increased work load [11]. A number of recent studies highlight that academic stress is related to mental health through the factors of coping ability, resilience and support systems. Students who cope well and enjoy high levels of social support can cope better with stress; when they feel supported, they are less stressed and therefore have better mental health [12]. On the other hand, poor coping mechanisms (avoidance, excessive screen time, etc.) result in increased anxiety and depression [13]. Students from countries with a highly competitive academic environment report higher levels of stress and mental health problems [14]. There are also gender differences, with girls experiencing more academic stress and distress [15]. Additionally, new research indicates that academic stress can also impact cognitive performance, sleep quality, and well-being [16]. Programs like stress reduction training in schools, mindfulness and counselling have been shown to be effective in relieving stress and enhancing emotional well-being [17]. In summary, existing research highlights the need for holistic strategies focusing on academic and mental health needs. Creating more harmonious educational settings and teaching strategies to cope with stress are crucial in ameliorating the negative impact of academic stress.

3. Conceptual Framework

The study uses two psychological theories to develop its conceptual framework: the Stress and Coping Theory and the Social Cognitive Theory displayed in figure 1. The theories discuss the effects of academic stress on the mental health of adolescents, and its cognitive, emotional and behavioural implications.

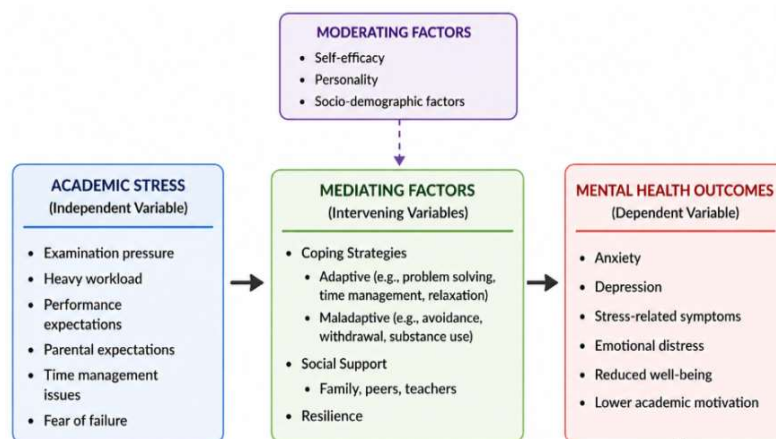


Fig.1. Conceptual work flow model

The Stress and Coping Theory posits that the stressors are academic stressors, like exams, workload and performance pressures. These stressors are appraised by adolescents, who then cope through the strategies of either an adaptive (e.g., problem solving and time management) or a maladaptive nature (e.g., withdrawal, avoidance). Copings skills influence the psychological distress (anxiety, depression). Social Cognitive Theory focuses on the influence of social and environmental factors, such as family and peer pressure, and school context. It also places importance on self-efficacy - the adolescent's confidence in their capacity to cope with school stressors - in buffering stress and promoting good psychological outcomes.

4 Methodology

4.1 Study Design

A cross-sectional design was chosen to study the association of academic stress and mental health problems among children in this study. We used a quantitative design to gather quantitative information on stress and mental health at one point in time. This type of study is used to efficiently determine relationships and patterns in a population.

4.2 Population and Sample

Our population of interest was 13-19 year old secondary school students. Convenience sampling (as mentioned) shown in table 1 was used to select 200 students. An equal number of male and female students with urban and semi-urban background were included to get a varied sample based on sociodemographic background.

Table.1. Demographic Characteristics of Participants

Variable	Category	Frequency (n=200)	Percentage (%)
Age Group	13–15 years	90	45%
	16–19 years	110	55%
Gender	Male	98	49%
	Female	102	51%
School Type	Urban	120	60%
	Semi-Urban	80	40%

4.3 Data Collection Methods

We used a questionnaire that was split into demographics, academic stress and mental health. A stress scale was used to gauge academic stress and Likert scales were used to gauge mental health status (anxiety and depression measures). However, semi-structured interviews with some of the participants (n=20) were also carried out to provide better understanding of students' experiences of stress and strategies to cope as shown in table 2.

Table.2. Study Variables and Measurement Tools

Variable	Measurement Tool	Type of Data
Academic Stress	Standardized stress scale	Quantitative
Anxiety	Likert scale questionnaire	Quantitative
Depression	Likert scale questionnaire	Quantitative
Coping Strategies	Interview guide	Qualitative

4.4 Data Analysis

Descriptive statistics (mean, frequency and percentage) for quantitative data were calculated using software packages such as SPSS. Descriptive statistics (such as measures of central tendency and percentage) were reported to describe the variables of interest and inferential statistics (correlation, Chi-square test) were used to explore the link between academic stress and psychological well-being. Thematic analysis was used to analyse qualitative data from interviews to find themes about stress, coping and well-being. This combination provided a rich understanding of the variables of interest.

5 Results & Discussion

This section discusses the association between academic stress and mental health of adolescents. A sample of 200 respondents were surveyed to determine trends in levels of stress, anxiety, depression and coping strategies. These findings are presented in the key areas of stress, mental health and relationship. Data is presented in tables and figures to clearly display these trends and interactions and the effects of different levels of academic stress on adolescents' mental health.

5.1 Academic Stress Levels

Table.3. Levels of Academic Stress

Stress Level	Frequency (n=200)	Percentage (%)
Low	40	20%
Moderate	90	45%
High	70	35%

Most of the students (45%) reported moderate level of stress in their academics and 35% reported high stress as evident in table 3. This shows a large number of students are subjected to unhealthy levels of stress.

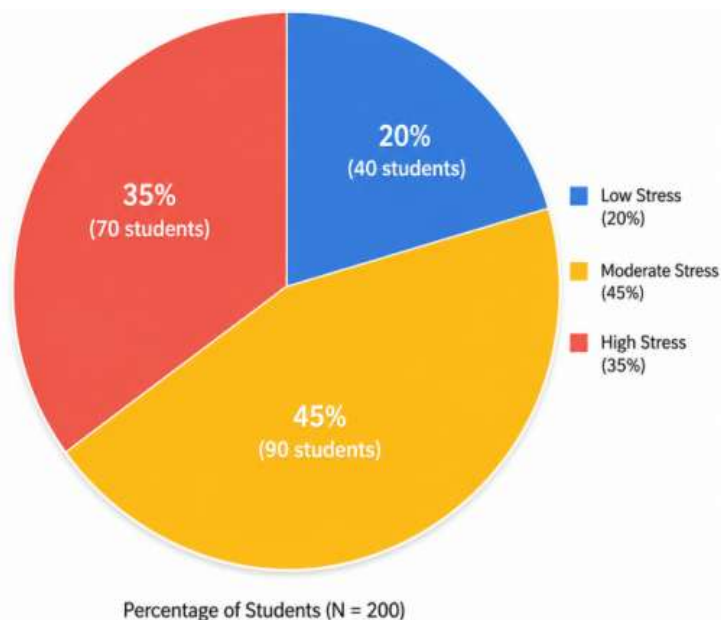


Figure.2. Distribution of Academic Stress Levels

The figure 2 shows that intermediate and high levels of stress are the most common among the group of adolescents, and reflect a commonality of academic stress.

5.2 Mental Health Outcomes

Table.4. Prevalence of Mental Health Issues

Outcome	Frequency	Percentage (%)
Anxiety	120	60%
Depression	90	45%
Emotional Distress	110	55%

High levels of anxiety (60%) and emotional distress (55%) among adolescents suggest a high level of mental health issues associated with academic stress shown in table 4.

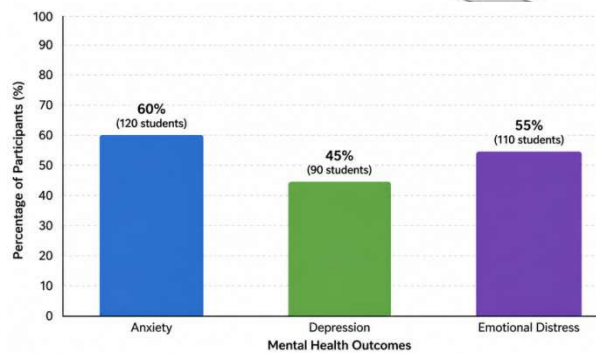


Figure.3. Mental Health Outcomes

Figure 3 shows anxiety, emotional distress and depression are the most common mental health problems of adolescents.

5.3 Association Between Academic Stress and Mental Health

Table.5. Stress vs Mental Health Outcomes

Stress Level	Anxiety (%)	Depression (%)
Low	25%	15%
Moderate	60%	40%
High	85%	70%

There appears to be a positive association between stress and mental health problems. As evident in table 5 Young people who reported high stress had higher levels of anxiety (85%) and depression (70%) than those who had low stress.

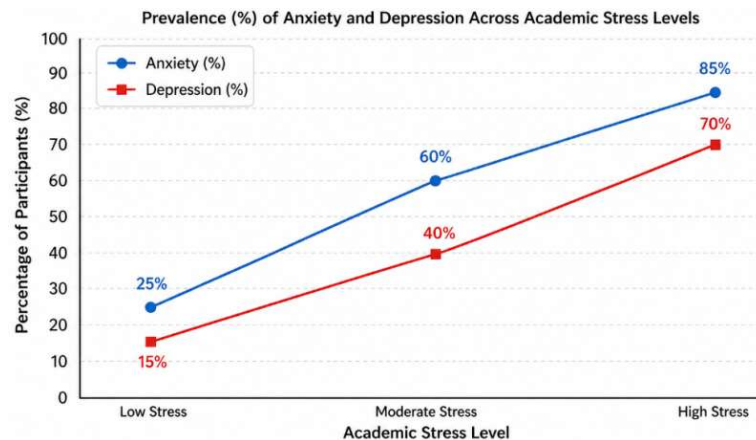


Figure.4. Relationship Between Stress and Mental Health

Figure 4 shows a positive trend in which greater academic stress is associated with greater anxiety and depression - highlighting a positive relationship.

5.4 Discussion

The results from this study show there is a strong link between academic stress and mental health problems in adolescents. Increased academic stress was found to be associated with higher rates of anxiety, depression and distress. High levels of stress were associated with shorter duration of distress and poorer mental health. This research supports previous findings that higher academic demands adversely affects mental health. The results also indicate that poor coping strategies and a lack of stress support Networks can exacerbate psychological issues associated with stress. Our findings suggest the importance of strategies for managing academic stress in schools. These can include counselling programs, time management skills, and a healthy school environment to combat the detrimental impacts of academic stress and improve adolescent mental health.

6 Conclusion and future scope

This research suggests academic stress plays an important role in mental health problems faced by adolescents. The study has clearly shown that higher levels of academic stress are linked to increased levels of anxiety, depression and stress. Students with high levels of academic stress were more susceptible to negative mental health effects, pointing to the need for early detection and treatment. The findings highlight that although academic performance matters, when it comes to at the expense of students' well-being, it becomes counterproductive. The research also highlights the role of coping skills and social support in buffering negative outcomes of academic stress. Parents, schools and governments need to collaborate to foster a healthy learning environment that prioritises achievement and well-being. Inclusion of stress reduction programs, counselling and life skills training can enhance adolescents' ability to cope with stress and maintain good mental health. Longitudinal research studies should be conducted for better understanding of the impact of academic stress over time on mental health. Moreover, investigating the impact of digital approaches, peer networks and culturally sensitive approaches can offer further understanding of how to enhance adolescent mental health.

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