

Relationship between Mental Health and Academic Stress among Adolescents: A Critical Review

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The present review explores the relationship between adolescent mental health issues and academic stress. Mental health problems are prevalent and significant concerns among contemporary adolescents. While various factors may contribute to poor mental health, academic stress appears to be the primary factor, stemming from factors such as academic demands, competitive environments, hectic schedules, stringent discipline, limited social skills, and parental expectations regarding academic performance. A comprehensive examination of studies conducted between 2000 and 2022 was taken to investigate these variables. The analysis reveals a substantial influence of academic stress on determining the mental health status of adolescents.

Keywords: Adolescents, Academic Stress, Mental Health, depression, Anxiety

Introduction

Mental health assumes a vital role in every stage of life, including childhood, adolescence, adulthood, and old age. World Health Organization (WHO) define and emphasizes that mental health is a state of being happy that allows one to take advantage of life to the fullest, to learn and work to one's greatest potential, and to make positive contributions to one's community. A more comprehensive interpretation involves the holistic well-being of an individual, encompassing their physical, mental, and social dimensions. Within healthcare, mental health assumes a paramount role, incorporating emotional, psychological, and social aspects. It significantly influences an individual's cognitive capacities, understanding, emotions, and conduct.

Karl Menninger (1947) defines mental health as "an adjustment of human beings to the world and to each other with a maximum of effectiveness and happiness". Adolescence is a critical period characterized by significant physical, emotional, and

cognitive changes, making it a vulnerable stage for mental health issues and academic stress. Numerous studies have highlighted the correlation between mental health and academic stress among adolescents. Academic stressors, such as academic performance expectations, peer pressure, and excessive workload, contribute to elevated levels of stress and anxiety.

Students often face significant pressure in their pursuit of education. Academic stress refers to the anxiety and/or stress experienced by individuals in relation to their schooling and education. Sarita (2015) describes academic stress as the unpleasant psychological experiences resulting from educational expectations imposed by parents, teachers, peers, and family members, parental pressure for academic achievement, the existing educational and examination system, and the burden of homework. Bisht (1989) says academic Stress consists of four components: academic frustrations, which occur when academic goals are hindered; academic conflicts, which arise from incompatible response tendencies toward academic goals; academic pressure, which occurs when students face high demands of time and energy to meet academic goals; and academic anxiety, which involves the fear of harm to academic goals.

Several factors that contribute to academic stress are:
○ The academic track followed by students in central and state board schools exposes them to new and

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challenging concepts, creating stress during the intermediate period.

- Students who are forced to change schools also experience stress due to the adjustments required in a new school environment.
- Board exams, conducted annually, are crucial for students, as their performance determines admission to good colleges.
- Entrance exams for fields such as engineering, medicine, law, etc., held once a year, intensify academic pressure on students.
- Tuition and coaching classes aimed at excelling in board and entrance exams add to the academic burden.
- Social comparison, wherein parents compare their child's academic abilities with those of older siblings or peers, leads to anxiety and worries about academic progress.
- The school environment, extracurricular limitations, peer influence, and the general social and familial environment also play a role in contributing to academic stress.

Adolescence is a transitional and critical period characterized by significant physiological, emotional, and cognitive transformations, making it a vulnerable stage for mental health issues. Adolescence is an age where educational careers become demanding due to the high level of competition for grades and seeking admissions to dream schools or colleges for courses of interest. Numerous studies have highlighted the correlation between mental health and academic stress among adolescents. Academic stressors, such as academic performance expectations, peer pressure, and excessive workload, contribute to elevated levels of stress and anxiety. This, in turn, can adversely impact adolescents' mental well-being, leading to symptoms of depression, anxiety disorders, and decreased self-esteem. Furthermore, the pressure to excel academically often leads to a neglect of self-care practices and limited social interactions, further exacerbating mental health challenges. Addressing the mental health needs of adolescents in the context of academic stress is crucial for their overall development and academic success.

Review of studies on academic stress with reference to mental health and other pertaining factors

High school students often experience a range of mental health issues. Multiple studies have demonstrated a clear link between high levels of

academic stress and a decrease in mental health. Exploring the relationship between academic pressures and mental health is vital for designing strategies that promote a balanced and supportive learning environment. Hosseinkhani, et al. (2020), in their study, revealed that high levels of academic stress were linked to a decrease in mental health. Specifically, at the student level, academic stress caused by families, peers, and the education system had significant impacts on the mental health of adolescents. A study highlighted that academic stress is a significant issue affecting a large proportion of high school students. Deb, Strodl and Sun(2015) investigated the relationship between academic stress, mental health, and various psychosocial factors in high school students, which indicated a positive correlation between academic stress and parental pressure as well as psychiatric problems. Examination-related anxiety was found to be positively associated with psychiatric problems. In a study conducted by Nithiyashri et al. (2022), the correlation analysis demonstrated a strong inverse relationship between teenage mental health and academic stress.

Similarly, Kaur (2014) acknowledged the negative impact of academic stress on the mental health of teenagers. The study found that girls with academic stress experienced poorer mental health compared to boys. Glozah (2013) conducted a study to examine the impact of academic stress and perceived social support on the psychological well-being of high school students. Girls reported higher levels of perceived social support but also higher levels of depression. Boys, on the other hand, reported higher levels of academic stress but better psychological well-being. Chyu and Chen (2022) examined how academic stress affects mental distress, academic self-disclosure to parents, and school engagement, and explored gender differences in the risk of the outcomes of academic stress. It was found that females are more susceptible to the detrimental outcomes of academic stress by suffering a higher level of mental distress. Khanekeshi(2012) investigated the combined effects of gender and grades on academic stress and depression. They found that when adolescents get stressed, girls show more depression symptoms than boys. Das and Sahoo (2012) examined the association between academic stress, depression, and gender differences among postgraduate students. Male students exhibited higher levels of stress and depression compared to female students.

Knowing that academic stress may be one of the major contributors to adolescent mental health problems, many psychosocial factors also play a key role. Chyu and Chen (2022) examined the psychosocial mechanisms of associations between academic stress and perfectionism, social-oriented achievement motivation, parent-child relationships, and the emphasis on academics in school. The study revealed that perfectionism and social-oriented achievement motivation were the dominant drivers of academic stress within the personal domain. In the findings, Lad (2021) indicated a significant negative correlation between perceptions of academic stress and mental well-being. Furthermore, there was a significant negative correlation between mental well-being and depression. The study also found significant positive correlations between depression and anxiety, as well as between anxiety and stress. These results demonstrate the strong interconnections among depression, anxiety, and stress, highlighting the significant challenges students face. According to Hashim (2003), academic stress is a significant source of stress for many students and is associated with depression and low academic achievement. Ang and Huan (2006) found a significant relationship between academic stress and suicidal ideation, and this relationship was partially mediated by depression. Dixon and Kurpius (2008) reported a strong association between academic stress and depressive behaviors, which also influenced suicidal ideation. Excessive academic workload was found to be one of the primary causes of depression among students by Kausar (2010), who identified academic workload as a significant predictor of stress among students. Sun, Dunne, Hou and Xu, (2013) suggested that excessive academic stress may lead to severe psychological symptoms such as depression, anxiety, and even suicidal thoughts (Koppenborg, Garnefski, Kraaij, & Ly, 2022). Through multiple regression analyses, it was determined that higher levels of perceived academic stress were significantly associated with anxiety and depressive symptoms. Storrer, Ahern and Tuckett (2010) conducted a systematic review focusing on students with mental health problems, including depression, and their impact on academic performance. The findings indicated a significant association between academic stress and depression, with higher levels of stress being linked to increased depressive symptoms. Jayanthi, Thirunavukarasu and Rajkumar (2015) reported a significant relationship

between academic stress and depression among adolescents in Tamil Nadu. Adolescents with academic stress had a higher risk of experiencing depression compared to those without academic stress. Demographic variables such as late adolescence, female gender, higher grade level, Tamil medium of instruction, and attending government schools were associated with academic stress.

Some factors, such as depression, anxiety, and stress, also contribute to the acceleration of academic stress in adolescents. Chyu and Chen (2022) examined the importance of providing proactive support to students experiencing academic stress, considering the significant associations between academic stress and self-disclosure to parents, as well as academic stress and school engagement. Suggestions should be provided to families and schools on how to proactively provide support to students who are experiencing academic stress. Barbayannis and colleagues (2022) indicated a strong connection between psychological well-being and academic stress among college students. Rodas and Antonio (2010) found a statistically significant relationship between depression prevalence and the severity of academic stressors, which contributes to understanding the factors influencing the mental health of students and highlights the importance of intervention programs to reduce stress levels and the occurrence of depression. Students who faced excessive academic workloads, including time spent in classes, labs, and assignments, experienced higher levels of stress and were found to have depression as one of the major causes of stress among students (Kausar 2010). In professional courses, academic pressure was observed at high intensities. Sharma and Wavare (2013) examined the level of depression and stress among students during their academic courses. Girls, particularly in the MBBS and Physiotherapy programs, had higher levels of depression compared to boys. Kang et al. (2013) conducted a study with health-related majors in Korea and found significant relationships between academic stress, academic major, and satisfaction with the major. Kwak, Park, and Ko (2022) studied academic stress and depression among students of nursing colleges, and they found that nursing students had high academic stress and depression.

In an international context, researchers have synthesized academic stress as a major factor in mental health issues in adolescents. Casuso-Holgado et al. (2019) studied if the academic context as stressful can

be associated with health symptoms (physical and mental) in higher education Spanish students enrolled in different degrees. The results of this study support the assumption that academic stress has a negative impact on college students' health. They identified that adolescents enrolled in engineering majors perceive the academic context as significantly more stressful. Afghan university students who faced academic stress but had strong emotional support were more likely to attain greater mental well-being compared to those with weak emotional support. Green, Faizi, Jalal, and Zadran, Z. (2022). found that receiving moderate and high levels of emotional support could serve as a protective factor against the negative effects of elevated levels of academic stress on mental well-being. Liu and Lu (2012) examined the effects of academic stress on depressive symptoms among Chinese high school students. They also explored the moderating effects of students' perceptions of gender and the school environment on the relationship between academic stress and depressive symptoms. Kang et al. (2013) conducted a study with health-related majors in Korea and found significant relationships between self-esteem, academic stress, academic major, satisfaction with the major, home income level, and the level of depression. Ho, Nguyen, and Nguyen(2022) studied Vietnamese adolescents to analyse the relationship between academic stress and depressive disorder and found that academic stress is associated with depression. Chyu and Chen (2022) examined how academic stress affects mental distress, academic self-disclosure to parents, and school engagement, and explored gender differences in the risk of the outcomes of academic stress on students from secondary schools in Hong Kong who participated in this study. The results indicate that academic stress has a significant association with all three outcomes. In a study on medical students in China, Chen et al. (2013) explored whether the degree of academic stress affects the level of distress. Gender and academic stress were significantly associated with distress. Compared with male students, female students were more likely to feel distress, which indicates that it is important to reduce academic stress and manage it in order to achieve better outcomes with regard to distress, especially in females.

Academic stress may have physiological implications for sleep patterns, blood pressure, nutrition, etc. Many studies analyze similar findings. Herselman

(2022), in his study, revealed that academic stress had a negative impact on mental health status. While daily walnut consumption showed improvements in mental health indicators and offered protection against some of the negative effects of academic stress on metabolic and stress biomarkers, However, findings suggest that walnut consumption may have a protective effect against some of the detrimental consequences of academic stress. Sharma and Wavare (2013) examined the level of depression and stress among students during their academic courses. The study found significant differences in vital parameters, blood pressure, and depression levels during examinations.

Conclusion

Even before the COVID-19 pandemic, around 50 million children in India were affected by mental health-related issues. According to the Indian Journal of Psychiatry, 80–90% of these children did not receive any form of assistance. India's Union Health Minister Mansukh Mandaviya was present at the launch of a UNICEF report, and he emphasized the need to provide specialized training to teachers to identify mental health problems among adolescents and youth, enabling them to receive guidance from psychologists.

Suggestions should be provided to families and schools on how to proactively provide support to students who are experiencing academic stress (Chyu&Chen 2022). Looking at the multidimensional studies that shed light on the major role of academic stress in the mental health of adolescents, educational institutions can adopt various strategies to reduce academic stress and enhance mental health. Firstly, providing comprehensive mental health support services is crucial, which includes on-campus counselling centres staffed by trained professionals who offer individual and group counselling sessions, stress management workshops, and resilience-building programs. Additionally, schools should prioritize creating a positive and inclusive learning environment by promoting a healthy work-life balance. This can be achieved through flexible scheduling options, encouraging physical activity, and integrating mindfulness and relaxation techniques into the curriculum. Collaboration with parents and guardians to foster open communication channels is also essential, with regular parent-teacher meetings and workshops on mental health awareness helping to establish a supportive network for students. Furthermore,

educational institutions should strive to reduce excessive academic pressure by revising the curriculum, implementing fair assessment methods, and providing additional academic support to struggling students. Finally, promoting peer support systems, organizing

extracurricular activities, and offering outlets for creative expression can contribute to a well-rounded educational experience that supports both academic success and mental well-being.

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