ISSN: 2584-0231(Online)



## International Journal of Multidisciplinary Research in Arts, Science and Technology

© IJMRAST | Vol. 3 | Issue 5 | May 2025 Available online at: https://ijmrast.com

**DOI:** https://doi.org/10.61778/ijmrast.v3i5.138

# ACADEMIC STRESS AND LEARNING DISABILITIES AMONG HIGH SCHOOL STUDENTS: A REVIEW

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## **ABSTRACT**

Learning disabilities and academic stress are two serious issues that can have a big influence on high school students' educational experiences and results. Students' mental and emotional health can be severely harmed by academic stress, according to research, which can result in low motivation, low self-esteem, and elevated anxiety and depression. Additionally, learning disabilities like dyslexia, dyscalculia, and dysgraphia can make academic stress even worse because they make it difficult for students to keep up with their peers and meet expectations. Early detection and intervention for learning disabilities is crucial, according to studies, since prompt assistance can greatly reduce the detrimental effects of academic stress and foster better learning outcomes. A more comprehensive and inclusive approach to education is also required, one that recognizes the various needs and skills of every student and offers sufficient resources and support to enable them to achieve, according to research. Through an examination of the intricate relationship between learning disabilities and academic stress, this review seeks to offer a thorough grasp of the difficulties high school students encounter as well as to pinpoint practical methods for fostering academic achievement, social-emotional health, and inclusive education.

Keywords: academic stress, learning disabilities, high school students.

#### Introduction

High school represents a pivotal phase in both academic and personal growth, characterized by notable cognitive, emotional, and social transformations. During this period, students are expected to manage increasingly complex academic responsibilities, social interactions, and extracurricular commitments, all while shaping their identities and sense of purpose. However, many high school students encounter difficulties in coping with these pressures, resulting in heightened levels of academic stress. This stress can lead to significant repercussions, such as diminished motivation, lower academic performance, and adverse effects on mental and physical health. Students with learning disabilities are particularly susceptible to the negative impacts of academic stress, as they often experience additional obstacles in obtaining necessary academic support and accommodations. Despite the significance of this issue, there is a clear need for a

thorough examination of existing literature regarding academic stress and learning disabilities among high school students. This review aims to consolidate current research on the prevalence, causes, and effects of academic stress in this demographic, as well as to evaluate the effectiveness of interventions and strategies designed to alleviate academic stress and foster academic achievement. By providing a detailed overview of the current knowledge in this field, this review aspires to guide the formulation of evidence-based policies, practices, and interventions that support the academic and personal well-being of high school students with learning disabilities.

## Significance of the Study

This review holds considerable significance for a number of reasons. Firstly, it fills a vital gap in current literature by offering a thorough overview of the interplay between academic stress and learning disabilities in high school students. By integrating findings from prior research, this review seeks to enhance understanding of the intricate factors contributing to academic stress in students with learning disabilities, as well as the effects of such stress on their academic performance and personal well-being. Secondly, the insights derived from this review have crucial implications for educational policymakers, administrators, and practitioners tasked with meeting the academic and personal needs of high school students with learning disabilities. By identifying effective strategies and interventions to mitigate academic stress and foster academic success, this review aims to guide the formulation of evidence-based policies and practices that can enhance educational outcomes and overall well-being for these students. Lastly, this review has the potential to foster a more inclusive and supportive educational environment that acknowledges the diverse needs and capabilities of all students, including those with learning disabilities. By emphasizing the importance of addressing academic stress and nurturing resilience among these students, this review seeks to promote a more nuanced understanding of the factors influencing academic success and well-being, while also informing the development of more effective strategies to support the academic and personal needs of all learners.

## **Objective of the Study**

This review is designed to accomplish several key objectives. First, it seeks to consolidate existing research on the prevalence and impact of academic stress among high school students with learning disabilities, emphasizing the intricate factors that contribute to this stress within this demographic. Second, the review will explore the interplay between academic stress and learning disabilities, examining how academic stress may intensify the challenges faced by these students and how their learning disabilities influence their experiences of academic stress. Third, it aims to identify effective strategies and interventions that can alleviate academic stress and foster academic success for high school students with learning disabilities, including accommodations, modifications, and the use of assistive technologies. Finally, the review intends to provide actionable recommendations for educational policymakers, administrators, and practitioners to cultivate a more supportive and inclusive educational environment for high school students with learning disabilities. This environment should prioritize the importance of addressing academic stress

and enhancing academic resilience to promote both academic success and overall well-being. By fulfilling these objectives, this review aspires to deepen the understanding of the complex dynamics between academic stress, learning disabilities, and academic achievement, while also guiding the development of more effective strategies to meet the academic and personal needs of high school students with learning disabilities.

## Methodology

This review utilized a systematic search and review methodology to gather relevant literature. We conducted searches in electronic databases, including Scopus, and Web of Science, for peer-reviewed articles published in English from 2010 to 2025. Additionally, we performed manual searches of pertinent journals and conference proceedings. The studies included in this review focused on high school students with learning disabilities, explored the relationship between academic stress and learning disabilities, and presented empirical data.

#### **Review of Related Literature**

Brata, W. W. W et al. (2025) Academic stress is a common challenge faced by university students, significantly influencing their academic performance. Despite this, the conceptual framework connecting the biological mechanisms of stress to educational outcomes remains incomplete. This systematic literature review aims to consolidate existing knowledge on the biological and educational aspects of academic stress and its effects on student performance. Utilizing the PRISMA framework, a thorough search was conducted in the Scopus database, resulting in an initial collection of 4,054 articles. After applying specific inclusion and exclusion criteria focused on academic stress among university students, 31 articles were chosen for indepth analysis. The review highlights four essential theoretical foundations: the neurocognitive relationship between stress and performance, the neurophysiology of stress, the epigenetic regulation of stress, and the role of genetic variations in stress responses. Building on these insights, the study suggests three principal directions for future research: enhancing the understanding of stress mechanisms, developing effective educational interventions, and adopting interdisciplinary approaches. These findings aim to establish a comprehensive framework for improving academic performance by advancing our understanding of the biological and educational aspects of stress.

**Jagiello, T.** (2024) presented a review to evaluate the effectiveness of high school-based programs in addressing academic stress. A systematic search identified 31 eligible studies spanning 13 countries, with programs categorized by intervention type, format, and facilitator. The findings indicated that the methodological quality of the majority of studies was subpar, with many employing inactive control groups. Consistent with academic stress theories, the most compelling evidence was found for programs based on cognitive-behavioral therapy (CBT). Both universal and targeted approaches demonstrated potential benefits, although the unique implementation challenges associated with each format are addressed. While most programs were facilitated by psychologists and generally yielded positive results, nearly all were CBT-focused. A smaller fraction of programs led by teachers also proved effective. Therefore, it is essential for

future research to assess the implementation success of these programs to enhance the efficacy of delivery by school staff. In conclusion, the field would greatly benefit from an increased number of randomized controlled trials featuring active control comparisons, larger sample sizes, and extended follow-up periods.

Polak, Nimrod. & Grossman, Ephraim, S (2024) Studies have indicated that people with learning disabilities frequently face more emotional difficulties and distress. With a focus on how reading, writing, and math challenges predict PD, this study aimed to investigate the connections between specific learning disabilities (SLDs) and PD while also accounting for the effects of age and gender. When compared to the general population, people with SLDs reported higher levels of psychological distress. Significant relationships were discovered between PD levels and difficulties in reading, writing, and math. PD was more strongly predicted by reading and writing difficulties than by math difficulties. Women and younger people also reported higher rates of PD, and regardless of these demographic characteristics, the severity of SLDs significantly affects PD. The impact of reading and writing difficulties on psychological distress is especially highlighted by these findings, which highlight the strong correlation between SLDs and PD.

Högberg, Bjorn (2024) examined the relationship between stress levels and the degree of external differentiation and vocational orientation in educational systems using harmonized survey data from students in over 30 countries in order to assess the framework's practical implications. Although country-specific fixed effects are taken into consideration, the empirical results largely support the framework's predictions: students in more vocationally oriented and differentiated systems report much lower stress levels. Academic performance also seems to be a less significant predictor of stress in these differentiated or vocational systems, probably because the stakes are lower. Finally, I outline additional hypotheses that should be explored in future research based on the framework and discuss the implications of these findings with regard to possible trade-offs between different educational policy goals.

Sudiksha, Verma, Vandana & Anchal (2024) conducted a study to examines the levels and origins of academic stress among 30 senior secondary school students (comprising 15 adolescent boys and 15 adolescent girls), as well as their coping strategies. The findings indicate elevated stress levels primarily attributed to examinations, tests, and homework, with additional contributions from parental expectations and peer competition. Notable coping mechanisms identified include engaging in physical activity, conversing with parents or friends, and listening to music. The results underscore the considerable effects of academic stress on students' overall well-being and highlight the necessity for effective interventions, such as stress management workshops and counseling services. Future research should concentrate on specific sources and effects of academic stress to inform the development of targeted interventions aimed at enhancing student resilience and mental health.

Gao, Xinhang (2023) purposed a study is to investigate the relationships and underlying mechanisms among teenage academic stress, academic anxiety, academic self-efficacy, and academic burnout. Academic self-efficacy showed a significant negative correlation with academic stress, whereas academic anxiety and academic burnout showed a significant positive correlation. 2) The relationship between academic stress and academic burnout was found to be partially mediated by academic anxiety. The direct relationship between

academic stress and academic burnout was considerably mitigated by academic self-efficacy, with higher levels of self-efficacy acting as a buffer against the negative consequences of academic stress. The latter part of the mediation model (academic anxiety  $\rightarrow$  academic burnout) was also significantly moderated by academic self-efficacy, suggesting that a lower level of self-efficacy increased the risk of academic anxiety.

**Pillai, Jitesh et. al (2023)** studied the frequency of academic stress in high school students, the causes of it, and the coping mechanisms these people use. The results are intended to advance knowledge of stress in relation to contemporary teaching methods in educational institutions. According to the study, 70.8% of students reported feeling little to no stress, 25.8% reported feeling moderate stress, 0.002% reported feeling high stress, and 0.02% reported not feeling any stress at all. Compared to their male counterparts, female participants reported higher levels of stress (p value = 0.04). Furthermore, stress levels were higher among students whose mothers (p value < 0.001) and fathers (p value < 0.001) had lower levels of education. Parental pressure (p value = 0.008) and the results of the previous year's final exam (p value = 0.005) were found to be important causes of stress. In terms of coping mechanisms, 0.5% of students said they never used any, whereas 53.6% said they used them occasionally, 45% said they used them frequently, and 0.8% said they used them frequently. Stress levels among high school students are typically low to moderate.

Rure, D et. al (2023) analysed the academic stress in high school students, compare stress levels between male and female students, and investigate the relationship between academic stress and the percentage of students who passed the 10th grade exam. Between June and August 2022, the Department of Psychiatry at a Madhya Pradesh medical college carried out a retrospective study that focused on Khandwa schools and the surrounding areas. The mean percentages for the ninth and tenth grades showed a significant difference. The mean SAAS scores did not significantly differ between the sexes, but the grade percentages did. Only the cognitive component of the SAAS demonstrated a significant correlation with the percentages attained in the 10th grade, indicating that most students had moderate levels of stress. Students frequently experience academic stress. Stress levels can rise as a result of outside variables like the transition from online to offline exams and the build-up to these tests. Future psychiatric disorders can be prevented by identifying stress early and taking appropriate action.

P, C, K & Shivappa, R (2022) presented a review the existing literature regarding the academic stress experienced by higher secondary school students, identifying its causes, stressors, and coping strategies. The literature indicates that key contributors to academic stress include perceived lack of competence, difficulties in managing academic demands, disrupted family dynamics, and peer pressure. Moreover, insufficient support from parents or teachers—whether real or perceived—can significantly heighten stress levels for students. Many students may feel overwhelmed by expectations while lacking a robust support system, which can be particularly detrimental for high-achieving individuals. It is important to recognize that high aspirations, coupled with negative attitudes, can lead to mental health issues, including stress, depression, and, in severe cases, suicidal thoughts. Consequently, it is advisable for parents and educational institutions to allow students to pursue their interests and abilities without imposing their own aspirations.

Students can effectively manage stress by reframing it as an opportunity for personal growth. Understanding the distinction between positive stress and negative stress is crucial for their development.

**Rishitha, A, V., & Subramanian, Sudhakar** (2022) determined the prevalence of specific learning disorders among middle school children and evaluate their academic performance during online education as influenced by these disorders. Previous academic records were reviewed to compare student performance in both online and traditional classroom environments. Data were analyzed using descriptive statistics. The findings indicate a prevalence of approximately 31% for dyslexia, 28% for dysgraphia, and 41% for dyscalculia. The mean APRS score for the case group was 43.76, compared to 187.47 for the control group, with Chi-Square analysis revealing a significant association between the two groups (p = 0.001 for learning disorders and p = 0.001 for academic performance scores). The transition to online education during the Covid-19 pandemic has adversely affected the academic performance of school children, highlighting the significant impact of learning disabilities.

Elavarasi, D & Rajendran, Poornima (2021) aimed to identify these academic stressors. Findings indicated Approximately 75% of students report experiencing moderate to high levels of academic stress. The mean scores across all six dimensions indicate that students consistently face moderate academic stress. The independent variables of gender, age, and family type do not significantly affect the levels of academic stress among secondary grade students. However, the number of siblings at home appears to be the only variable that influences their academic stress levels. Conclusion: This section discusses strategies to mitigate academic stressors for secondary grade students, who are experiencing moderate to high levels of stress.

Vijayashree, L & Srinivasa, Shishira (2021) Stress is undoubtedly a significant concern, yet it can often be managed through small adjustments in our daily routines. It is particularly prevalent among government officials, managers, politicians, homemakers, and educators. Identifying the root causes of stress is essential for effective management. We can outline precise and effective interventions to address this issue. Stress remains a subjective experience, heavily influenced by individual perceptions and responses to perceived threats. Left unaddressed, stress can lead to conditions such as depression and anxiety, among others. The increasing number of stress management seminars, articles, and research studies over recent decades indicates a rising awareness of stress-related challenges. This study aims to explore the conceptual framework of stress, particularly in students, and examine how they cope with tension. Additionally, it includes a comprehensive literature review on the topic.

Anupama, K & Sarda, D (2020) Adolescence is a critical time between childhood and adulthood, marked by major changes in a number of areas, such as academics, social interactions, familial relationships, physical health, and psychological well-being. Adolescents need to have important life skills during this time in order to handle difficulties, deal with everyday problems, handle academic pressures, and preserve their mental health. In order to create an intervention program that will improve the stress-coping skills of 240 school-aged adolescents, this study intends to assess the levels of academic stress and ten life skills that the World Health Organization (WHO) recommends. Despite gender differences, the results indicate that

improving life skills in school-age adolescents can significantly reduce academic stress because there is a strong correlation between these two variables.

Jena, Debasmita (2020) made an attempt to find out the relationship between learning disabilities and the propensity for academic stress among students. The research involved a sample of 120 students—60 male and 60 female—enrolled in the 10th grade, selected through a random sampling technique from Balasore District in Odisha. The findings indicated a significant difference in learning disabilities between male and female students, as well as between urban and rural students. However, no significant differences were found in academic stress levels between male and female students or between rural and urban students. Notably, there was a positive correlation between learning disabilities and academic stress, suggesting that students with learning disabilities experience higher levels of academic stress.

**Joel, A** (2020) assessed the academic stress levels among high school students, utilizing a normative survey method. The sample comprised 350 students from the IX Standard in Coimbatore District, Tamil Nadu, India, selected through a stratified random sampling technique. A T-test was conducted to analyze the significance of differences in academic stress based on gender, age, and locality. The findings indicated that male students experience higher levels of academic stress compared to their female counterparts.

Parveen, Sumaila et. al (2019) Academic stress is a common issue faced by students across all cultures, ethnicities, and societies. The intensity of this stress can vary significantly based on differing educational methods and curricula. It typically arises when students struggle to meet various expectations, which may include parental demands, peer influences, self-doubt, challenging coursework, and other contextual factors. The repercussions of academic stress can be serious, potentially leading to lower academic performance, mood disorders, and behavioral issues. Therefore, it is essential to identify the sources of academic stress in order to develop effective intervention strategies. In this regard, a study was conducted to examine the differences in academic stress levels between male and female secondary students, with a total sample size of 120 (60 males and 60 females). The findings indicated no significant differences in stress levels between the two groups of students. Additionally, there were no notable differences in academic stress associated with the educational backgrounds of parents. However, significant differences were observed between students residing in hostels and those who do not, as well as among students in grades VIII, X, and XI.

Pandey, Manju & Nidhi (2018) conducted a study to compare the stress levels of primary school students with dyscalculia, considering variables such as gender and school type. The findings indicate that male and female primary school students with dyscalculia experience stress differently, as their scores revealed significant differences. Conversely, no significant distinction was observed between dyscalculic students attending government versus private schools. Additionally, the results suggest that there is no interaction effect between gender and school type concerning the academic stress experienced by primary school students with dyscalculia.

Cavioni, Valeria et. al (2017) examined the significant impact of social and emotional learning programs on children with Learning Disabilities (LD). The initial section outlines the challenges these

students may face in their educational journey, including difficulties with peer acceptance, building friendships, experiencing social isolation, and grappling with low self-efficacy and self-esteem, as well as behavioral issues, both internalized and externalized. In order to highlight the benefits that social and emotional learning programs provide to students with learning disabilities, the paper then investigates the relationship between these programs and learning disabilities. The study concludes by highlighting the significance of universal social and emotional learning as a strategy to support students with LD in their academic endeavors and social integration.

**Subramani, C. & Kadhiravan, S.** (2017) purposd of this study was to look into the connection between high school students' mental health and academic stress. The results showed that while students from private schools reported better mental health, they also experienced higher levels of academic stress than their counterparts from government schools. Furthermore, a noteworthy correlation was noted between high school students' mental health and academic stress. This article discusses the implications of these findings.

Kumar, R Sreevalsa., & Side Ali, Sani (2015) analysed the levels of academic stress that college students with disabilities faced and the coping mechanisms they used to deal with it. Furthermore, it investigated possible noteworthy distinctions in stress and coping strategies between students with and without disabilities, as well as between students with and without disabilities. Four scales were administered separately to 117 students with disabilities and 103 students without disabilities in order to gather data. Both groups primarily used problem-focused coping strategies and reported moderate levels of academic stress, according to the findings. Interestingly, students with visual impairments expressed more stress than their peers without disabilities or with other disabilities.

Givon, SARA. & Court, Deborah (2010) In order to investigate their main coping mechanisms, the authors interviewed 20 Israeli high school students with learning disabilities over a three-year period. "Avoidance," "Rebellion," "Reconciliation," and "Determination" are the four main emotional-cognitive strategies that were identified by the study. As the students worked to integrate, accept, and manage their difficulties, these tactics were seen to develop in a hierarchical fashion. The study emphasizes how important it is to diagnose problems early and accurately, provide targeted remedial instruction, and provide social support in order to help students develop healthy coping strategies. As a hierarchical continuum, the findings provide a framework for school counselors and teachers to evaluate their students' functioning at the moment and support their development of coping mechanisms that support both academic achievement and emotional well-being.

## **Conclusion**

This review offers a thorough analysis of the intricate relationship between academic stress and learning disabilities in high school students. The findings indicate that academic stress can significantly affect the academic performance, social interactions, and emotional health of students with learning disabilities. Furthermore, the review emphasizes the necessity of recognizing and addressing the specific challenges these students encounter, as they may be particularly susceptible to the adverse effects of

academic stress due to issues with organization, time management, and self-regulation. It also highlights the importance of collaboration among educators, policymakers, and parents to foster supportive and inclusive learning environments that facilitate academic achievement, social inclusion, and emotional well-being for all students, irrespective of their abilities. Additionally, the review advocates for ensuring that students with learning disabilities have access to necessary accommodations, modifications, and assistive technologies to mitigate academic stress and enhance their academic performance. Ultimately, the review suggests that by understanding the intersection of academic stress and learning disabilities, and by collaboratively addressing the challenges faced by these students, we can cultivate a more supportive, inclusive, and equitable educational landscape that values diversity and advances academic success for all learners.

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#### Cite this Article

Sada Warsi, Academic Stress and Learning Disabilities Among High School Students: A Review, International Journal of Multidisciplinary Research in Arts, Science and Technology (IJMRAST), ISSN: 2584-0231, Volume 3, Issue 5, pp. 51-60, May 2025.

Journal URL: https://ijmrast.com/

DOI: https://doi.org/10.61778/ijmrast.v3i5.138



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