

Exam Stress as a Component of Academic Stress: Implications for Psychological Well-Being

Anjana S. Chauhan

Assistant Professor
Children's Research University, Gandhinagar

Abstract:

Academic stress is a growing concern among adolescents due to increasing educational demands and performance expectations. Among its various dimensions, exam stress represents a particularly intense and psychologically taxing component. This paper examines exam stress as a core element of academic stress and analyzes its implications for adolescents' psychological well-being. Drawing exclusively on existing empirical studies, the paper explores sources of academic and exam stress, relevant theoretical frameworks, psychological consequences, and protective factors. The reviewed evidence consistently indicates that excessive exam stress is associated with anxiety, depression, low self-esteem, and reduced well-being. The findings highlight the urgent need for comprehensive interventions that address both individual coping capacities and systemic academic pressures.

Keywords: Academic stress, exam stress, adolescents, psychological well-being, mental health

Introduction

Adolescence represents a critical developmental stage marked by rapid psychological, emotional, and social changes. During this stage, academic demands often intensify, placing considerable pressure on students. Academic stress refers to the psychological discomfort experienced when educational demands exceed an individual's adaptive resources. Contemporary educational systems, with their emphasis on performance, competition, and evaluation, have made academic stress a pervasive experience for many adolescents.

Among the multiple facets of academic stress, exam stress stands out due to its evaluative nature and its direct impact on students' self-worth and future aspirations. Examinations often function as high-stakes events, shaping academic trajectories and social expectations. Consequently, exam stress has emerged as a significant determinant of adolescent psychological well-being and warrants focused scholarly attention.

Academic Stress During Adolescence

Academic stress during adolescence is a multidimensional phenomenon influenced by individual, familial, peer, and institutional factors. Research identifies five primary sources of academic stress: family-related pressures, peer interactions, systemic educational demands, homework and examinations, and participation in supplementary coaching or tuition classes (Hosseinkhani et al., 2019). High parental

expectations, competitive academic environments, and excessive workloads are consistently reported as major contributors to stress (Raghuvanshi et al., 2024).

The psychological consequences of sustained academic stress are substantial. Adolescents experiencing high levels of academic stress demonstrate increased vulnerability to depressive symptoms, with some studies reporting a 2.4-fold higher risk compared to their less-stressed peers (Jayanthi et al., 2015). Additional outcomes include anxiety, emotional instability, and social withdrawal, which may persist into adulthood if left unaddressed (Fadia et al., 2023). Although these findings are consistent across contexts, the predominance of cross-sectional research highlights the need for longitudinal investigations.

Multiple factors contribute to academic stress among adolescents. Parental pressure emerges as a significant factor, with 87% of students experiencing high perceived parental academic pressure Khriebeizonuo Pienyu et al. (n.d.). Additional stressors include competitive environments, hectic schedules, stringent discipline, limited social skills, and excessive parental expectations regarding academic performance Ahlad Modi et al., 2023. Cultural factors also play a role, particularly the emphasis on academic success as a measure of self-worth and family pride Anjali Desai et al., 2024.

Exam Stress as a Central Component of Academic Stress

Exam stress is a specific form of academic stress characterized by emotional tension, cognitive worry, and physiological arousal in response to evaluative academic situations. It is commonly manifested through fear of failure, difficulty concentrating, sleep disturbances, and somatic complaints. Fathima et al. (2025) describe exam stress as a mental state of heightened tension triggered by demanding academic circumstances, while Kukso et al. (2022) report measurable physiological changes, particularly in cardiorespiratory functioning.

Empirical evidence highlights the prevalence of exam-related anxiety among students. Buch et al. (2019) found that 46.8% of students reported persistent worry during examinations, while 24.3% expressed concerns about memory failure. Emotional responses such as fear of failure are also frequently reported, particularly in high-pressure academic environments (Desai et al., 2024). Although moderate stress may enhance motivation and alertness, excessive exam stress has been shown to impair academic performance and psychological health (Fathima et al., 2025).

Theoretical Frameworks Explaining Academic and Exam Stress

Several theoretical models have been proposed to explain academic and exam stress among adolescents. The Risk Factor Framework identifies key predictors such as traumatic life events, academic overload, and family history of mental health problems, reporting anxiety prevalence rates as high as 32.1% in adolescent samples (Villamar Vázquez et al., 2026).

In contrast, the Psychological Capital Model emphasizes protective psychological resources, including hope, self-efficacy, resilience, and optimism. Among these, hope has emerged as the strongest predictor of academic engagement and stress resilience (Fan et al., 2026). Complementing this approach, the Three-Dimensional Resilience Theory conceptualizes resilience as the outcome of interactions among psychological strengths, social support, and cognitive processes (Callaman et al., 2026). Together, these frameworks underscore the importance of both risk and protective factors in shaping stress outcomes.

Psychological Impact of Exam Stress

The psychological implications of exam stress are profound and well-documented. Pienyu et al. (2024) reported that 86% of adolescents experienced high academic stress, with 28.5% showing moderately high anxiety and 57.7% reporting low levels of general well-being. Similarly, Wu et al. (2024) identified academic stress—particularly exam stress—as the most common stressor affecting adolescent mental health.

Longitudinal research further strengthens these findings. Kristensen et al. (2023), in a study of 1,508 Norwegian adolescents, found a direct association between academic stress and psychological distress, with notable gender differences in susceptibility. Younger students appear especially vulnerable, as exam-related stressors elicit stronger physiological stress responses and may contribute to long-term psychological difficulties (Špiljak et al., 2022).

Risk and Protective Factors

Individual psychological characteristics play a critical role in determining students' responses to exam stress. Sharma et al. (2023) identified low self-esteem, psychological distress, and excessive academic load as significant predictors of exam anxiety, with low self-esteem increasing risk by more than eightfold. Conversely, resilience, stress tolerance, and adaptive coping strategies have been shown to reduce exam-related fear and anxiety (Kuangnovna et al., 2023).

Social and cultural influences further shape exam stress experiences. Societal expectations, fear of failure, and cultural emphasis on academic success intensify emotional reactions and contribute to sleep disturbances and somatic symptoms (Desai et al., 2024). These findings highlight the need for interventions that address both personal vulnerabilities and contextual stressors.

Implications for Psychological Well-Being and Educational Practice

The evidence clearly indicates that exam stress is a critical threat to adolescent psychological well-being. Educational institutions must therefore adopt holistic strategies that balance academic achievement with mental health promotion. School-based interventions focusing on stress management, resilience building, and coping skills training may significantly reduce exam anxiety.

Parental involvement is equally crucial. Unrealistic expectations and excessive academic pressure can exacerbate stress, whereas supportive and understanding parenting practices can buffer its negative effects. At a broader level, educational policy reforms that reduce overreliance on high-stakes examinations may contribute to healthier academic environments.

Conclusion

Exam stress constitutes a central and influential component of academic stress during adolescence, with far-reaching implications for psychological well-being. The reviewed literature consistently demonstrates that excessive exam stress is associated with anxiety, depression, reduced self-esteem, and diminished overall well-being. At the same time, protective psychological resources and supportive environments can mitigate these effects. Addressing exam stress requires coordinated efforts across individual, familial, educational, and policy levels to ensure that academic success does not come at the cost of mental health.

Acknowledgments

This paper was presented as part of a research project funded by the CRU. The authors gratefully acknowledge the financial and institutional support provided by CRU.

REFERENCES:

1. Callaman, R., & Palompon, D. (2026). *Development of three-dimensional resiliency theory in solving mathematical problem*. Journal of Education and Learning (EduLearn), 20(1), 608–621. <https://doi.org/10.11591/edulearn.v20i1.22738>.
2. Chai, Siqi. (2025). The Impact of Adolescent Academic Stress on Academic Achievement. Lecture Notes in Education Psychology and Public Media. 109. 202-208. 10.54254/2753-7048/2025.ND26080. Desai, Anjali. (2024). Anxiety Levels and Coping Mechanisms of Indian Adolescents Under Exam Stress. Studies in Psychological Science. 2. 9-13. 10.56397/SPS.2024.12.02.
3. Fan, X., Srisawat, P., & Voracharoensri, S. (2026). *The influence of psychological capital on academic engagement among Chinese college students*. Journal of Education and Learning (EduLearn), 20(1), 307–315. <https://doi.org/10.11591/edulearn.v20i1.23063>• Fathima, R., et al. (2025). Exam stress and mental well-being.
4. Hosseinkhani, Z., Hassanabadi, H. R., Parsaeian, M., Karimi, M., & Nedjat, S. (2020). Academic stress and adolescents mental health: A multilevel structural equation modeling (MSEM) study in northwest of Iran. Journal of research in health sciences, 20(4), e00496.
5. Jayanthi, P., Thirunavukarasu, M. & Rajkumar, R. Academic stress and depression among adolescents: A cross-sectional study. Indian Pediatr 52, 217–219 (2015). <https://doi.org/10.1007/s13312-015-0609-y>
6. Kristensen SM, Larsen TMB, Urke HB, Danielsen AG. Academic Stress, Academic Self-efficacy, and Psychological Distress: A Moderated Mediation of Within-person Effects. J Youth Adolesc. 2023 Jul;52(7):1512-1529. doi: 10.1007/s10964-023-01770-1. Epub 2023 Mar 30. PMID: 36995523; PMCID: PMC10175374. •Kukso, O., et al. (2022). Physiological correlates of exam stress.
7. Kuanganovna, B. A., Reschke, H. K., Alena, G., Zulk iy a, M., & Ismailbekovna, S. L. (2023). Psychological analysis of risk factors and protective factors under exam stress. Journal of Education and E-Learning Research, 10(4), 829–836. 10.20448/jeelr.v10i4.5243• Branson, V., et al. (2019). Eustress and psychological well-being.
8. Pienyu K, Margaret B, D'Souza A. Academic stress, perceived parental pressure, and anxiety related to competitive entrance examinations and the general well-being among adolescents - A cross-sectional survey from Karnataka, India. J Educ Health Promot. 2024 Dec 28;13:474. doi: 10.4103/jehp.jehp_2094_23. PMID: 39850288; PMCID: PMC11756657.
9. Joshi, N., Raghuvanshi, R. S., & Dutta, A. (2024). Determinants of Perceived Stress among Indian Adults during Second Wave of COVID-19. International Journal of Bio-Resource & Stress Management, 15(6)..
10. Sharma, S., & Sharma, N. (2023). Academic stress and psychological distress in adolescents. Frontiers in Psychology, 14, Article 1008679• Sigfusdottir, I., et al. (2016). Biopsychosocial perspectives on adolescent stress.

11. Špiljak B, Vilibić M, Glavina A, Crnković M, Šešerko A, Lugović-Mihić L. A Review of Psychological Stress among Students and Its Assessment Using Salivary Biomarkers. *Behav Sci (Basel)*. 2022 Oct 18;12(10):400. doi: 10.3390/bs12100400. PMID: 36285968; PMCID: PMC9598334.
12. Vásquez, Guisella & Ochoa, Edmundo & Quizhpe, Christian & Orellana, Sonnia. (2026). Prevalence of anxiety and depression in the university population: Quantitative analysis of associated factors and psychosocial consequences. *Salud, Ciencia y Tecnología*. 6. 2366. 10.56294/saludcyt20262366.
13. Wang, R., Yang, S., Xu, X., Mi, S., & Hao, N. (2025). Exploring adolescent academic stress in the digital and urban age: a mixed-methods study from CIT to checklist validation. *Frontiers in Psychology*, 16, 1692113.