

The Impact of Stress on Academic Performance: Strategies for High School Students

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Abstract

High school is a crucial stage in a student's educational journey, a time when academic demands, extracurricular activities, social interactions, and personal growth intersect. In this comprehensive review, we will delve deeply into the intricate relationship between stress and academic achievement among high school students [1].

Additionally, we will provide an extensive analysis of strategies that students, parents, educators, and schools can implement to effectively manage stress and promote improved academic outcomes.

1. The Complex Connection: Stress and Academic Performance

Stress is a natural response to challenging situations. It serves as an adaptive mechanism, signaling our bodies to prepare for potential threats. However, when stress becomes chronic or overwhelming, it can have detrimental effects on cognitive functioning, emotional well-being, and academic performance [2].

2. Understanding the Effects of Stress

1. **Impaired Concentration:** Stress can create a heightened state of alertness, which paradoxically impairs the ability to focus. When students are overwhelmed with worries and concerns, it can be difficult for them to focus on their studies, which reduces productivity and academic performance [3].
2. **Memory Problems:** Chronic stress can interfere with memory processes. The hormone cortisol, released during stress, negatively impacts the hippocampus, a critical brain region responsible for memory formation and retrieval. Consequently, students may struggle to retain and recall information necessary for exams and assignments [4].
3. **Procrastination:** Stress frequently triggers avoidance behaviors. Students grappling with academic pressures may resort to procrastination as a coping mechanism, delaying tasks in a bid to reduce anxiety. Unfortunately, this procrastination cycle exacerbates stress and results in rushed, subpar work [5].
4. **Physical Health Issues:** Stress's adverse physical effects can manifest in numerous ways, including headaches, sleep disturbances, and digestive problems. These physical symptoms not only contribute to a student's discomfort but can also disrupt

their ability to attend school regularly and engage effectively in the learning process [6].

3. Strategies to Manage Stress

1. **Effective Time Management:** Time management is a fundamental skill for high school students. It involves prioritizing tasks, setting realistic goals, and breaking down assignments into manageable steps. By mastering these techniques, students can reduce the feeling of being overwhelmed and enhance their productivity [7].
2. **Healthy Lifestyle Choices:** Encouraging students to adopt a healthy lifestyle is essential. Regular physical exercise not only promotes physical well-being but also releases endorphins, natural stress relievers. A balanced diet and adequate sleep are equally crucial for overall health and stress management [8-13].
3. **Mindfulness and Relaxation Techniques:** Teaching students mindfulness and relaxation techniques equips them with valuable tools to manage stress in real-time. Techniques such as deep breathing exercises, meditation, and progressive muscle relaxation can help alleviate anxiety, improve focus, and enhance overall emotional well-being [12-18].
4. **Seeking Support:** High school students should be encouraged to seek support from a range of sources, including teachers, school counselors, parents, and peers. These individuals can offer guidance, emotional support, and practical solutions when students feel overwhelmed or uncertain about how to manage their stress effectively [19-21].
5. **Balancing Extracurricular Activities:** While extracurricular activities are crucial for personal growth and skill development,

students must strike a careful balance between these activities and their academic responsibilities. Overcommitting to extracurriculars can lead to heightened stress levels, resulting in a negative impact on academic performance[13,22].

4. The Role of Schools and Educators

High schools play a pivotal role in supporting students' well-being and academic success. Here are some key strategies for schools and educators to consider [20,23,24]:

1. Promoting a Stress-Aware Culture: Schools can create a culture that acknowledges and addresses stress among students. This includes offering stress management workshops, providing access to counseling services, and educating both students and parents about the signs and effects of stress [18,24-26].
2. Flexible Learning Environments: Educators can help reduce stress by creating flexible learning environments that accommodate different learning styles and paces. This can include varied assessment methods, extended deadlines, and opportunities for self-directed learning [18,24,27,28].
3. Effective Communication: Schools should encourage open communication between students, parents, and educators. Teachers can play a crucial role in identifying students who may be struggling with stress and connecting them with appropriate support services [18,24,29,30].
5. Wellness Programs: Implementing wellness programs that incorporate physical activity, mindfulness practices, and stress management into the curriculum can provide students with valuable tools for managing stress effectively [18,24].

5.The Role of Parents

Parents also have a significant impact on their child's ability to manage stress and succeed academically [31-33]. Here are some strategies parents can employ:

1. Open Dialogue: Encourage open and honest communication with your child. Create an environment where they feel comfortable discussing their academic challenges and stressors.
2. Set realistic expectations: Help your child set realistic academic goals. It is important to acknowledge their individual strengths and limitations and avoid placing excessive pressure on them to achieve unattainable standards.
3. Model stress management: Children often learn by example. Demonstrating healthy stress management techniques, such as regular exercise and effective time management, can be influential in shaping your child's behavior.
4. Support and Encourage Self-Care: Encourage your child to engage in self-care activities, such as pursuing hobbies, spending time with friends, and getting adequate sleep. These activities can help reduce stress and improve overall well-being.

6. Conclusion

In conclusion, the relationship between stress and academic performance among high school students is intricate and multifaceted. While stress is a natural response to challenges, chronic stress can hinder academic success and negatively impact

a student's overall well-being.

Understanding the effects of stress on concentration, memory, procrastination, and physical health is crucial for all stakeholders involved. Implementing strategies for managing stress effectively, including time management, healthy lifestyle choices, mindfulness, seeking support, and balancing extracurricular activities, empowers high school students to thrive academically while maintaining their mental and physical health during this pivotal phase of their lives.

Furthermore, the role of schools, educators, and parents is paramount in creating an environment that supports students in managing stress and achieving their academic goals. By working together, we can ensure that high school students not only excel academically but also develop lifelong skills for managing stress and maintaining overall well-being.

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References

1. Wuthrich, V. M., Jagiello, T., & Azzi, V. (2020). Academic stress in the final years of school: A systematic literature review. *Child Psychiatry & Human Development*, 51, 986-1015.
2. Frazier, P., Gabriel, A., Merians, A., & Lust, K. (2019). Understanding stress as an impediment to academic performance. *Journal of American College Health*, 67(6), 562-570.
3. Vogel, S., & Schwabe, L. (2016). Learning and memory under stress: implications for the classroom. *npj Science of Learning*, 1(1), 1-10.
4. Sandi, C., & Pinelo-Nava, M. T. (2007). Stress and memory: behavioral effects and neurobiological mechanisms. *Neural plasticity*, 2007.
5. Sirois, F. M. (2023). Procrastination and stress: A conceptual review of why context matters. *International Journal of Environmental Research and Public Health*, 20(6), 5031.
6. Yari beygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI journal*, 16, 1057.
7. Zhang, F., Liu, J., An, M., & Gu, H. (2021). The effect of time management training on time management and anxiety among nursing undergraduates. *Psychology, health & medicine*, 26(9), 1073-1078.
8. Velten, J., Bieda, A., Scholten, S., Wannemüller, A., & Margraf, J. (2018). Lifestyle choices and mental health: a longitudinal survey with German and Chinese students. *BMC Public Health*, 18, 1-15.
9. Lee, J., Papa, F., Jaini, P. A., Alpini, S., & Kenny, T. (2020). An Epigenetics-Based, Lifestyle Medicine-Driven Approach to Stress Management for Primary Patient Care: Implications for Medical Education. *American Journal of Lifestyle Medicine*, 14(3), 294-303.
10. Baban, K. A., & Morton, D. P. (2022). Lifestyle medicine

- and stress management. *J Fam Pract*, 71(Suppl 1 Lifestyle), S24-S29.
11. Naidoo, U. (2021). Eat to Beat Stress. *American Journal of Lifestyle Medicine*, 15(1), 39-42.
 12. Worthen, M., Cash, E. (2023). Stress Management. 2023 Aug 14. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing.
 13. Zisopoulou, T., & Varvogli, L. (2023). Stress Management Methods in Children and Adolescents: Past, Present, and Future. *Hormone Research in Paediatrics*, 96(1), 97-107.
 14. Zhang, D., Lee, E. K., Mak, E. C., Ho, C. Y., & Wong, S. Y. (2021). Mindfulness-based interventions: an overall review. *British medical bulletin*, 138(1), 41-57.
 15. Toussaint, L., Nguyen, Q. A., Roettger, C., Dixon, K., Offenbacher, M., Kohls, N., ... & Sirois, F. (2021). Effectiveness of progressive muscle relaxation, deep breathing, and guided imagery in promoting psychological and physiological states of relaxation. *Evidence-Based Complementary and Alternative Medicine*, 2021.
 16. Sharma, M., & Rush, S. E. (2014). Mindfulness-based stress reduction as a stress management intervention for healthy individuals: a systematic review. *Journal of evidence-based complementary & alternative medicine*, 19(4), 271-286.
 17. Pascoe, M. C., Thompson, D. R., & Ski, C. F. (2017). Yoga, mindfulness-based stress reduction and stress-related physiological measures: A meta-analysis. *Psychoneuroendocrinology*, 86, 152-168.
 18. Yu, T., Xu, J., Jiang, Y., Hua, H., Zhou, Y., & Guo, X. (2022). School educational models and child mental health among K-12 students: a scoping review. *Child and adolescent psychiatry and mental health*, 16(1), 1-16.
 19. Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan Iii, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: from neurobiology to clinical practice. *Psychiatry (edgmont)*, 4(5), 35.
 20. Scheiner, C., Daunke, A., Seidel, A., Mittermeier, S., Romanos, M., Kölch, M., & Buerger, A. (2023). LessStress-how to reduce stress in school: evaluation of a universal stress prevention in schools: study protocol of a cluster-randomised controlled trial. *Trials*, 24(1), 1-16.
 21. Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan Iii, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: from neurobiology to clinical practice. *Psychiatry (edgmont)*, 4(5), 35.
 22. Mukesh, H. V., Acharya, V., & Pillai, R. (2023). Are extracurricular activities stress busters to enhance students' well-being and academic performance? Evidence from a natural experiment. *Journal of Applied Research in Higher Education*, 15(1), 152-168.
 23. van Loon, A. W., Creemers, H. E., Okorn, A., Vogelaar, S., Miers, A. C., Saab, N., ... & Asscher, J. J. (2022). The effects of school-based interventions on physiological stress in adolescents: A meta-analysis. *Stress and health*, 38(2), 187-209.
 24. Caldwell, D. M., Davies, S. R., Hetrick, S. E., Palmer, J. C., Caro, P., López-López, J. A., ... & Welton, N. J. (2019). School-based interventions to prevent anxiety and depression in children and young people: a systematic review and network meta-analysis. *The Lancet Psychiatry*, 6(12), 1011-1020.
 25. Miller, L. D., Laye-Gindhu, A., Bennett, J. L., Liu, Y., Gold, S., March, J. S., ... & Waechter, V. E. (2011). An effectiveness study of a culturally enriched school-based CBT anxiety prevention program. *Journal of Clinical Child & Adolescent Psychology*, 40(4), 618-629.
 26. Jansen-van Vuuren, J., & Aldersey, H. M. (2020). Stigma, acceptance and belonging for people with IDD across cultures. *Current developmental disorders reports*, 7, 163-172.
 27. He, Q., Beveridge, E. H., Vargas, V., Salen, A., & Brown, T. I. (2023). Effects of Acute Stress on Rigid Learning, Flexible Learning, and Value-Based Decision-Making in Spatial Navigation. *Psychological Science*, 34(5), 552-567.
 28. Harel, O., Hemi, A., & Levy-Gigi, E. (2023). The role of cognitive flexibility in moderating the effect of school-related stress exposure. *Scientific Reports*, 13(1), 5241.
 29. Bell, J., & Condren, M. (2016). Communication strategies for empowering and protecting children. *The Journal of Pediatric Pharmacology and Therapeutics*, 21(2), 176-184.
 30. https://www.researchgate.net/publication/356284667_EFFECTIVE_COMMUNICATION_IN_TEACHING_AND_LEARNING
 31. Parenteau, A. M., Alen, N. V., Deer, L. K., Nissen, A. T., Luck, A. T., & Hostinar, C. E. (2020). Parenting matters: Parents can reduce or amplify children's anxiety and cortisol responses to acute stress. *Development and Psychopathology*, 32(5), 1799-1809.
 32. Wu, K., Wang, F., Wang, W., & Li, Y. (2022). Parents' education anxiety and children's academic burnout: The role of parental burnout and family function. *Frontiers in Psychology*, 12, 764824.
 33. Kostulski, M., Breuer, D., & Döpfner, M. (2021). Does parent management training reduce behavioural and emotional problems in children with intellectual disability? A randomised controlled trial. *Research in Developmental Disabilities*, 114, 103958.