

## A Comparative Study on Academic Stress among Adolescent Boys and Girls in Selected Schools of Bardoli, Gujarat

Shivani Patel

<sup>1</sup>Assistant Professor, Vibrant Nursing College, Surat, Gujarat, India

**Corresponding Author:** Shivani Patel

**Email:** siyupatel1993@gmail.com

**Submitted:** 04-12-24

**Revised:** 02-01-2025

**Accepted:** 06-01-2025

**Published:** 08-01-2025

---

### Abstract

*Academic stress has become an increasingly prevalent issue among adolescents due to mounting academic expectations and societal pressures. This study aims to compare the levels of academic stress among adolescent boys and girls in selected higher secondary schools of Bardoli, Gujarat. A non-experimental descriptive research design was employed using a convenient sampling technique. A total of 100 science stream students (50 boys and 50 girls) from 12th standard participated in the study. Academic Stress Scale was used to measure stress levels. Results revealed that girls experienced higher academic stress than boys. The independent 't' test showed a statistically significant difference in academic stress levels between the two groups ( $t = 6.68$ ,  $p < 0.05$ ). Hobbies were the only socio-demographic variable significantly associated with boys' stress levels. The study concludes that gender plays a role in academic stress, with girls being more affected.*

**Keywords-** Academic stress, adolescents, gender comparison, stress scale, Bardoli

---

### INTRODUCTION

In today's competitive educational environment, academic stress has emerged as a significant concern, particularly among adolescents. The phase of adolescence is marked by rapid physical, emotional, and social changes, and during this crucial developmental stage, students are often burdened with academic expectations, examinations, and the pressure to perform well. Academic stress refers to the psychological distress associated with educational demands that exceed a student's adaptive resources. If not properly managed, it can lead to anxiety, depression, burnout, and even suicidal tendencies. In India, the problem of academic stress has become particularly severe. Students face intense competition starting from school, with high expectations from parents, teachers, and society. Admission into prestigious courses such as engineering, medicine, and management is viewed as the only path to success by many families, adding to the students' burden. According to the National Crime Records Bureau (2000), over 2,300 students committed suicide in a single year due to examination-related stress. These alarming statistics reflect the urgency of addressing academic stress among adolescents. Research indicates that academic stress affects not only academic performance but also physical health, sleep patterns, social life, and emotional well-being. Girls, in particular, are believed to be more susceptible to academic stress due to factors such as emotional sensitivity, social expectations, and limited coping mechanisms. Boys, on the other hand, may underreport stress due to social conditioning and may resort to behavioral changes instead of seeking help. Understanding the patterns and differences in academic stress between adolescent boys and girls is essential for designing effective interventions. While several studies have been conducted globally, there remains a need for more region-specific data, especially in semi-urban and rural areas of India like Bardoli, Gujarat. This study aims to bridge this gap by assessing and comparing the levels of academic stress among adolescent boys and girls studying in the 12th science stream at selected higher secondary schools in Bardoli. The study also investigates the relationship between academic stress and socio-demographic variables such as age, type of family, parental education, and hobbies. By identifying the extent of stress and understanding the influencing factors, educators, parents, and policymakers can develop strategies to support adolescent students more effectively. Providing proper counseling services, promoting stress-relieving hobbies, reducing academic pressure, and fostering a supportive school environment are crucial steps toward ensuring students' mental and emotional well-being. Academic stress among adolescents is not just an educational issue but a public health concern. This research highlights the need for early identification of stress levels and tailored interventions that consider gender differences and individual circumstances. Addressing academic stress in a structured and sensitive manner can contribute to healthier, happier, and more productive youth.

### Objectives

1. To assess the socio-demographic variables of adolescent boys and girls.

2. To determine the level of academic stress among adolescent boys.
3. To determine the level of academic stress among adolescent girls.
4. To compare academic stress levels between adolescent boys and girls.
5. To associate academic stress with selected socio-demographic variables.

### Hypotheses

H<sub>01</sub>: There is no significant difference in academic stress levels between adolescent boys and girls.

H<sub>02</sub>: There is no association between academic stress and socio-demographic variables among adolescent boys.

H<sub>03</sub>: There is no association between academic stress and socio-demographic variables among adolescent girls.

### METHODOLOGY

**Research Approach:** Descriptive

**Design:** Non-experimental descriptive research

**Setting:** Selected higher secondary schools in Bardoli

**Population:** 12th-grade science stream students from B.A.B.S and Vasishtha schools

**Sample Size:** 100 students (50 boys and 50 girls)

**Sampling Technique:** Convenient sampling

**Inclusion Criteria:**

- Aged 16–19 years
- Studying in the science stream
- Willing to participate

**Exclusion Criteria:**

- Absent during data collection
- Non-cooperative students
- Students from commerce and arts streams

**Tool Used:** Academic Stress Scale

**Data Analysis:** Descriptive and inferential statistics

### RESULTS

The study was undertaken to assess and compare the level of academic stress among adolescent boys and girls studying in Class 12 (science stream) at selected higher secondary schools in Bardoli, Gujarat. A total of 100 students participated in the study, equally divided between boys ( $n = 50$ ) and girls ( $n = 50$ ). The data were collected using a standardized Academic Stress Scale, and both descriptive and inferential statistics were applied to analyze the findings. The primary outcome of this study was to determine whether there was a statistically significant difference in academic stress levels between boys and girls. The results revealed that adolescent girls exhibited higher levels of academic stress compared to their male counterparts. Descriptive statistics showed a mean difference of 14.22 in the stress scores between girls and boys. Additionally, the median difference was 16, the mode difference was 10, and the standard deviation difference was minimal at 0.07. The range difference between the two groups was recorded as 1, indicating some overlap in the distribution of scores but a clear overall trend of higher stress in girls.

The stress level categorization further highlighted the gender difference. Among the 50 girls:

- 46 (92%) had moderate academic stress
- 2 (4%) had severe stress
- 2 (4%) had mild stress

In contrast, among the 50 boys:

- 41 (82%) reported moderate academic stress
- 9 (18%) reported severe stress
- None reported mild stress

Although a slightly higher percentage of boys reported severe stress compared to girls, the overall stress scores among girls were higher, which was supported by the calculated means and medians. It is worth noting that the majority in both groups experienced moderate stress, indicating that academic stress is a common phenomenon among adolescents regardless of gender. The inferential analysis was conducted using an **independent t-test** to

compare the academic stress scores of boys and girls. The calculated t-value was 6.68, which exceeded the tabulated t-value of 1.98 at the 0.05 significance level. This led to the rejection of the null hypothesis ( $H_{01}$ ), which stated that there is no significant difference in academic stress levels between boys and girls. The result confirmed that a statistically significant difference exists, with girls experiencing more academic stress than boys. Further analysis was done to explore the association between academic stress and various socio-demographic variables such as age, parental education, type of family, and hobbies. For adolescent girls, no socio-demographic variables showed a statistically significant association with their academic stress levels. Hence, the second null hypothesis ( $H_{02}$ ) — that there is no association between academic stress and socio-demographic variables among girls — was accepted. However, among adolescent boys, one variable—hobbies—was found to have a significant association with academic stress levels. Boys who reported having regular hobbies such as sports, music, or reading showed comparatively lower levels of stress than those without any hobbies. All other socio-demographic variables such as age, parental education, and type of residence were not found to be significantly associated with stress. Therefore, the third null hypothesis ( $H_{03}$ ) — that there is no association between academic stress and socio-demographic variables among boys — was partially rejected, as hobbies showed a significant relationship. In summary, the findings indicate that adolescent girls in the selected schools of Bardoli experience significantly higher academic stress than boys. While most students, irrespective of gender, fall into the moderate stress category, the intensity and average scores are higher for girls. Moreover, the presence of hobbies plays a potential protective role against academic stress among boys, while no such association was observed among girls. These results highlight the need for gender-specific stress management strategies and interventions at the school level.

## DISCUSSION

The present study focused on assessing and comparing the level of academic stress among adolescent boys and girls in selected schools of Bardoli, Gujarat. The results clearly indicate that academic stress is prevalent among both genders, with girls experiencing significantly higher levels of stress than boys. This finding aligns with previous studies that suggest girls are generally more prone to emotional and psychological distress due to academic and social pressures. The majority of both boys (82%) and girls (92%) reported moderate levels of stress, yet the overall mean stress score was higher in girls. This suggests that although academic stress is common among adolescents, girls tend to internalize academic expectations more deeply. Cultural and societal expectations, fear of failure, and personal ambition could be contributing factors. It is also possible that girls are more self-aware and expressive about their stress levels, leading to higher reporting.

Interestingly, while socio-demographic factors such as age, family type, or parental education showed no significant association with academic stress among girls, the variable of **hobbies** was significantly associated with stress levels among boys. Boys with hobbies reported lower stress, indicating that recreational activities may serve as a buffer against academic pressure. This finding highlights the importance of encouraging students, particularly boys, to engage in extracurricular and leisure activities to promote mental well-being.

The rejection of the null hypothesis regarding gender difference in stress levels underscores the need for gender-sensitive mental health programs in schools. The acceptance of hypotheses related to socio-demographic variables suggests that stress is more influenced by individual coping mechanisms than external factors. Overall, the study supports the growing body of evidence that academic stress is a significant concern among adolescents and requires proactive intervention, especially for girls. Creating a balanced academic environment and encouraging stress-relieving activities can help students cope better and perform more effectively.

## CONCLUSION

This study was conducted to assess and compare the level of academic stress among adolescent boys and girls studying in Class 12 (science stream) in selected higher secondary schools of Bardoli, Gujarat. The findings clearly indicate that academic stress is a widespread issue among adolescents, affecting both boys and girls, with a significant difference observed in the stress levels between genders. The analysis revealed that a higher proportion of girls experienced greater academic stress compared to boys. While the majority of both groups reported moderate stress levels, girls had a higher average score. This gender disparity in academic stress can be attributed to various psychosocial factors, including societal expectations, peer pressure, emotional sensitivity, and a higher tendency among girls to internalize academic challenges. The calculated t-value (6.68) confirmed a statistically significant difference in stress levels between boys and girls, leading to the rejection of the null hypothesis ( $H_{01}$ ). This suggests that gender does influence how adolescents perceive and respond to academic pressures. Further, the study examined the influence of socio-demographic factors on academic stress. Among girls, none of the socio-demographic variables (age, family background, parental education, etc.) showed a statistically significant association with their stress levels, suggesting that girls across various backgrounds are equally susceptible to academic stress. On the other hand, among boys, the presence of hobbies showed a

significant relationship with stress levels. Boys who actively engaged in hobbies such as music, sports, or reading were found to have comparatively lower academic stress than those without such engagements. This indicates that recreational and extracurricular activities can play a crucial role in stress management, particularly for boys. In conclusion, the study emphasizes the urgent need to recognize academic stress as a serious issue among adolescents, especially girls. Schools, parents, and mental health professionals should work collaboratively to identify stress early and implement appropriate coping mechanisms. Gender-specific interventions, regular counseling sessions, stress-relief programs, and promotion of healthy hobbies can help reduce the burden of academic stress. Teachers and educational institutions should foster a supportive and pressure-free learning environment that promotes mental well-being along with academic excellence. Overall, this research contributes valuable insights into the gender-based differences in academic stress and highlights the importance of incorporating holistic approaches in adolescent education and mental health support systems.

## REFERENCES

1. Deb, S. (2001). *Anxiety among school children*. New Delhi: Rajat Publications.
2. National Crime Records Bureau. (2000). *Accidental deaths and suicides in India*. Ministry of Home Affairs, Government of India.
3. Hockenberry, M. J., & Wilson, D. (2010). *Wong's essentials of pediatric nursing* (8th ed.). Elsevier India Pvt. Ltd.
4. Kadapatti, M. G., & Vijayalaxmi, A. H. M. (2012). Stressors of academic stress – A study on pre-university students. *Indian Journal of Scientific Research*, 3(1), 171–175.
5. Kaur, S. (n.d.). Academic stress. Retrieved from <http://www.pamf.org/teen/life/stress/academicpressure.html>
6. Narimani, M., Taklavi, S. M., & Siahpoosh, H. (2009). Emotional intelligence among boys and girls. *Procedia - Social and Behavioral Sciences*, 5, 332–337.
7. Khan, A. A. (2012). Comparative study of academic stress among high school students of CBSE and UP Board under grading system. Retrieved from <http://ashadikhan.blogspot.in/2012/08/comparative-study-of-academic-stress.html>
8. American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: APA.
9. Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. *International Journal of Stress Management*, 11(2), 132–148. <https://doi.org/10.1037/1072-5245.11.2.132>
10. Bista, B. (2016). Study on academic stress among adolescents. *International Journal of Humanities and Social Science Invention*, 5(6), 63–71.
11. Verma, S., & Gupta, J. (1990). Some aspects of high academic stress and symptoms. *Journal of Personality and Clinical Studies*, 6(1), 7–12.
12. Rana, R. A., & Mahmood, N. (2010). The relationship between test anxiety and academic achievement. *Bulletin of Education and Research*, 32(2), 63–74.
13. Ang, R. P., Huan, V. S., & Braman, O. R. (2007). Factorial structure and invariance of the Academic Expectation Stress Inventory across Hispanic and Chinese adolescent samples. *Child Psychiatry and Human Development*, 38, 73–87. <https://doi.org/10.1007/s10578-006-0032-1>
14. Salim, S., & Sajjad, A. (2015). A study on the impact of academic stress on students' performance. *International Journal of Management and Applied Science*, 1(9), 1–5.
15. Shodhganga. (n.d.). Academic stress among adolescents. Retrieved from [https://shodhganga.inflibnet.ac.in/bitstream/10603/56324/10/10\\_chapter%203.pdf](https://shodhganga.inflibnet.ac.in/bitstream/10603/56324/10/10_chapter%203.pdf)
16. Chouhan, D. S. (2016). Stress and Its Major Effects on Human Health. *International Journal of Multidisciplinary Allied Research Review and Practices*, 3(2), 380–384.
17. Bhadauriaa, R. S., Selvarajb, B. N. X., Chouhan, D. S., Kumawat, A. K., Begumd, F., & Davide, J. B. Mental workload levels and influencing factors among ICU nurses: A systematic review.