



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

A Study of Academic Achievement among Senior Secondary School Students in Relation to Their Self-Confidence with Reference to Gender

Sunny Jaglan

Research Scholar, Department of Education, Baba Mastnath University, Asthal Bohar, Rohtak

Email ID: jaglan.sanya@gmail.com

Dr. Nitin

Assistant Professor, Department of Education, Baba Mastnath University, Asthal Bohar, Rohtak

Email ID: drdnksrtk@gmail.com

ABSTRACT

The present study investigated the relationship between academic achievement and self-confidence among senior secondary school students with reference to gender. The objectives of the study were to compare the academic achievement and self-confidence of male and female students and to examine differences in academic achievement among students with different levels of self-confidence. The study adopted the descriptive survey method. The population comprised senior secondary school students studying in CBSE- and HBSE-affiliated schools in Haryana. A sample of 600 Class XI students (300 male and 300 female) was selected using stratified random sampling from 24 schools in the districts of Rewari, Rohtak, and Hisar. Academic achievement was measured through students' examination marks, while the Self-Confidence Scale developed by Gupta and Lakhani (2018) was used to assess self-confidence. The collected data were analyzed using Mean, Standard Deviation, Independent Samples t-test, One-Way ANOVA, and Tukey HSD Post Hoc Test. The findings revealed that female students performed significantly better than male students in both academic achievement and self-confidence. The results also showed that students with high self-confidence achieved significantly higher academic achievement than students with average and low self-confidence. The study established a significant positive relationship between self-confidence and academic achievement, indicating that students with greater self-confidence tend to perform better academically. The findings highlight the importance of confidence-building programmes, effective guidance services, and supportive classroom practices for enhancing students' academic performance and overall development.

Keywords: Academic Achievement, Self-Confidence, Senior Secondary School Students, Gender, Haryana.

1. INTRODUCTION



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

Education is one of the most important means of achieving the overall development of an individual and society. It helps in developing knowledge, skills, values, attitudes, and desirable behaviour among learners. According to Aggarwal (2018), education is a continuous process that prepares individuals to become responsible and productive members of society. In India, education plays a vital role in national development by promoting social, economic, and cultural progress. The senior secondary stage of education is particularly important because it acts as a bridge between school education and higher education or vocational life. At this stage, students make important decisions regarding their future careers, making their academic achievement a major concern for students, parents, teachers, and educational planners. Academic achievement is regarded as one of the most important indicators of educational success. It reflects the extent to which students have acquired the knowledge and skills prescribed in the curriculum and is generally measured through examination marks or grades. According to Best and Kahn (2016), academic achievement is an important outcome of the teaching-learning process. Similarly, Mangal (2019) stated that academic achievement is influenced by several cognitive, psychological, social, and environmental factors. Variables such as intelligence, study habits, motivation, family environment, school climate, socio-economic status, emotional maturity, and self-confidence significantly influence students' academic performance (Koul, 2017).

Among these variables, self-confidence is considered one of the most important psychological factors influencing academic achievement. Self-confidence refers to an individual's belief in his or her own abilities, skills, and judgment. According to Bandura (1997), individuals who possess confidence in their capabilities are more likely to work hard, overcome challenges, and achieve success. Students with high self-confidence participate actively in classroom activities, complete assignments with greater enthusiasm, express their ideas freely, and perform better in examinations. Pajares (1996) also reported that confident students demonstrate greater persistence, stronger academic motivation, and better learning outcomes, while Schunk (1991) observed that self-confidence encourages students to set higher goals and continue their efforts despite difficulties.

The senior secondary stage is one of the most challenging periods in a student's educational life. Students studying in Classes XI and XII experience academic pressure due to board examinations, competitive entrance tests, and career-related decisions. At the same time, they undergo important physical, emotional, and psychological changes. According to **Santrock (2019)**, adolescence is a period during which confidence, emotional maturity, and decision-making abilities develop rapidly. Students with higher self-confidence are generally better able to cope with academic stress and perform more successfully in their studies.



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

The National Education Policy (Ministry of Education, 2020) emphasizes the holistic development of learners by promoting critical thinking, creativity, communication skills, confidence, and emotional well-being. Therefore, developing self-confidence has become an important objective of school education in India. Teachers play a significant role in building students' confidence by providing positive reinforcement, constructive feedback, and opportunities for active participation. Likewise, parents contribute by offering emotional support, encouragement, and a positive home environment (Mangal, 2019). Schools can further strengthen students' confidence through co-curricular activities, leadership opportunities, debates, sports, and cultural programmes (Aggarwal, 2018). Several studies conducted in India and abroad have reported a positive relationship between self-confidence and academic achievement. Students with higher self-confidence generally perform better academically because they show greater motivation, perseverance, classroom participation, and problem-solving ability. However, the relationship may vary according to gender, school environment, socio-economic background, and other personal factors. Hence, further investigation is needed, particularly among senior secondary school students in the Indian context.

The present study focuses on examining the relationship between academic achievement and self-confidence among senior secondary school students. The findings are expected to help teachers, parents, school counsellors, and educational administrators understand the importance of developing students' self-confidence for improving academic performance. The study may also contribute to educational research and assist in designing suitable guidance and educational programmes for promoting confidence and academic excellence among senior secondary school students. Thus, studying academic achievement in relation to self-confidence is both educationally and socially significant.

2. REVIEW OF RELATED LITERATURE

Tripathy and Srivastava (2012) studied the effect of academic achievement on the level of self-confidence among school students in India. The study found that students with higher academic achievement possessed greater self-confidence than students with lower achievement, indicating a positive relationship between the two variables. Al-Hebaish (2012) investigated the relationship between general self-confidence and academic achievement among university students in Saudi Arabia. The findings revealed a significant positive relationship, showing that confident students performed better in academic activities. Rezaei (2012) examined the role of self-confidence and self-efficacy in the academic achievement of female students in Iran. The study reported that higher self-confidence was positively associated with better academic performance. Çiftçi and Yildiz (2019) conducted a meta-analysis of international TIMSS data to examine the effect of self-confidence on mathematics achievement. The findings indicated that



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com **ISSN: 2250-3552**

students with greater mathematical self-confidence achieved significantly higher mathematics scores. Jones and Kim (2020) studied the role of academic self-confidence among international college students in the United States and Canada. The study found that academic self-confidence positively influenced students' educational adjustment and perceived academic success. Moneva and Tribunalo (2020) examined the relationship between students' self-confidence and academic performance. The findings showed that students with higher self-confidence performed better in classroom activities and academic tasks. Kumar and Sood (2021) studied academic achievement in relation to self-confidence among Class XII Commerce students in India. The study reported a positive relationship between students' self-confidence and their academic achievement. Watson, Sotardi, Park and Roy (2021) investigated gender self-confidence and perceived academic achievement among adolescents in New Zealand. The findings showed that higher self-confidence was associated with better perceived academic performance and lower scholastic stress. Ndze (2022) examined self-confidence as a determinant of academic achievement among university students in Cameroon. The study concluded that students with higher self-confidence demonstrated better academic performance and greater classroom participation. Chang, Wu and Ye (2022) studied achievement motivation, active learning, and confidence among graduate students. The findings indicated that greater confidence was associated with improved academic achievement and learning outcomes. Al-Haddad, Afari, Khine and Yao (2023) examined the relationship among self-confidence, self-regulation, and academic achievement. The study found that students with higher self-confidence and better self-regulation achieved superior academic performance. Kumari and Biswas (2025) investigated the role of self-confidence in the academic success of undergraduate students in Jharkhand, India. The findings revealed that higher self-confidence contributed positively to students' motivation, participation, and academic achievement.

The reviewed Indian and international studies indicate that self-confidence is generally positively related to academic achievement. Confident students tend to participate more actively, attempt challenging tasks, remain persistent during difficulties, manage scholastic stress, and obtain better educational outcomes. The studies also show that academic success can itself strengthen self-confidence, suggesting that the relationship may be reciprocal. However, comparatively few recent Indian investigations have focused specifically on senior secondary school students. Therefore, a study of academic achievement among senior secondary school students in relation to their self-confidence is relevant and justified.



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

3. SIGNIFICANCE OF THE STUDY

The present study is significant because academic achievement is one of the most important indicators of educational success, and self-confidence is a vital psychological factor that influences students' learning, motivation, and overall personality development. Senior secondary school students face increasing academic pressure due to board examinations, competitive entrance tests, career selection, and parental expectations. During this stage, students with higher self-confidence are generally more willing to participate in classroom activities, express their ideas, solve academic problems independently, and cope effectively with examination stress. On the other hand, students with low self-confidence may experience fear of failure, anxiety, hesitation, and poor academic performance. Therefore, studying the relationship between academic achievement and self-confidence is essential for understanding how psychological factors contribute to students' educational success.

The findings of the study will be useful to teachers, parents, school counsellors, and educational administrators in identifying students who require guidance and confidence-building support. The study may help teachers adopt learner-centred teaching strategies, positive reinforcement, and motivational techniques to improve students' confidence and academic performance. Parents may also understand the importance of providing emotional support and encouragement to their children. Furthermore, the findings may assist curriculum planners and policymakers in designing programmes that promote students' confidence, mental well-being, and academic excellence in accordance with the objectives of the National Education Policy 2020. The study will also contribute to the existing body of educational research and provide useful references for future researchers interested in the relationship between academic achievement and self-confidence among senior secondary school students.

Statement of the Problem

A Study of Academic Achievement among Senior Secondary School Students in Relation to Their Self-Confidence with Reference to Gender

Objectives

1. To compare the academic achievement of male and female senior secondary school students.
2. To compare the level of self-confidence of male and female senior secondary school students.
3. To compare the academic achievement of senior secondary school students having high and low level of self-confidence



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

Hypotheses

1. There is no significant difference in academic achievement of male and female senior secondary school students.
2. There is no significant difference in self-confidence of male and female senior secondary school students.
3. There is no significant difference in academic achievement of senior secondary school students having high and low level of self-confidence

Research Method

The present study proposed to measure the academic achievement in relation to level of self-confidence and gender among senior secondary school students. The investigator employed descriptive research method.

Population of the Study

The population for the present study includes all senior secondary school students in Haryana affiliated with the C.B.S.E. and H.B.S.E. boards. This group represents the larger educational demographic the study aims to understand. Due to its vast size, only a reachable portion of this population was considered for sampling.

Sample and Sampling Techniques

A total of 600 Class XI students (300 male and 300 female) were randomly selected using a stratified random sampling technique. The sample was drawn from 24 schools across three randomly chosen districts—Rewari, Rohtak, and Hisar—ensuring geographic and demographic diversity. The lottery method was used to select divisions, districts, and schools to reduce bias and enhance representativeness.

Tool Used

Self-Confidence Scale made By Gupta and Lakhani (2018) was used to accessed Self confidence among senior secondary school students.

Statistical techniques used

Mean, SD, 't' and ANOVA tests were used to analyze the data.

Data Analysis

The data was analyzed by using Mean, SD and 't' test are presented in table 1 to table 3.4 below:

Table 1: Comparison of academic achievement among male and female students

Gender	N	Mean	Std. Deviation	't' test
Male students	300	69.24	11.670	5.948**
Female students	300	74.82	11.305	

**Significant at 0.01 level



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

Table 1 shows that the mean academic achievement score of female students (74.82) is higher than that of male students (69.24). The obtained t-value (5.948) is significant at the 0.01 level, indicating a significant difference in academic achievement between male and female students. Thus, female students performed significantly better than male students.

Table 2: Comparison of self confidence among male and female students

Gender	N	Mean	Std. Deviation	't' test
Male students	300	188.00	16.822	3.145**
Female students	300	192.52	18.402	

**Significant at 0.01 level

Table 2 reveals that female students (M = 192.52) have a higher mean self-confidence score than male students (M = 188.00). The obtained t-value (3.145) is significant at the 0.01 level, indicating that female students possess significantly higher self-confidence than male students.

Table 3: Descriptive Statistics – Academic Achievement by Self-Confidence Level

Self-Confidence Level	N	Mean	Std. Deviation
Low Self-Confidence	112	61.49	11.52
Average Self-Confidence	216	71.38	10.81
High Self-Confidence	272	76.90	9.56
Total	600	72.03	11.81

Table 3 indicates that academic achievement increases with the level of self-confidence. Students with low self-confidence obtained the lowest mean score (61.49), whereas students with high self-confidence obtained the highest mean score (76.90). This suggests a positive relationship between self-confidence and academic achievement.

Table 3.1: Levene's Test for Homogeneity of Variance

Levene Statistic	df1	df2	Sig. (p-value)
2.163	2	597	0.116

Table 3.1 presents the results of Levene's Test for Homogeneity of Variance. Since the significance value ($p = 0.116$) is greater than 0.05, the assumption of equal variances is satisfied. Therefore, the data are suitable for One-Way ANOVA.

Table 3.2: One-Way ANOVA – Effect of Self-Confidence on Academic Achievement

Source	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Between Groups	18,993.91	2	9,496.96	87.75	0.000
Within Groups	64,611.14	597	108.23		
Total	83,605.05	599			



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

Table 3.2 shows the results of the One-Way ANOVA. The obtained F-value (87.75) is significant at the 0.01 level ($p < 0.001$), indicating a significant difference in academic achievement among students with different levels of self-confidence. Hence, self-confidence has a significant effect on academic achievement.

Table 3.3: Tukey HSD Post Hoc Test – Group Differences in Academic Achievement

Self-Confidence Level	N	Subset 1	Subset 2	Subset 3
Low Self-Confidence	112	61.49		
Average Self-Confidence	216		71.38	
High Self-Confidence	272			76.90
Significance (p)		1.000	1.000	1.000

Table 3.3 presents the Tukey HSD post hoc test results. The findings indicate that students with high self-confidence achieved significantly higher academic achievement than students with average and low self-confidence, while students with average self-confidence also performed significantly better than those with low self-confidence. This confirms a positive relationship between self-confidence and academic achievement.

4. FINDINGS OF THE STUDY

The analysis of the data revealed that female senior secondary school students achieved significantly higher academic achievement than male students, as reflected by the significant t-value at the 0.01 level. Similarly, female students were found to possess significantly higher self-confidence than male students, indicating that gender has a significant influence on both academic achievement and self-confidence. The descriptive analysis further showed that students with high self-confidence obtained the highest mean academic achievement scores, followed by students with average self-confidence, while students with low self-confidence recorded the lowest academic achievement. The results of Levene's Test confirmed that the assumption of homogeneity of variance was satisfied, making the data suitable for One-Way ANOVA. The ANOVA results revealed a highly significant difference in academic achievement across different levels of self-confidence, indicating that self-confidence has a significant effect on students' academic performance. Furthermore, the Tukey HSD post hoc analysis showed that students with high self-confidence performed significantly better academically than students with average and low self-confidence, while students with average self-confidence also achieved significantly higher scores than those with low self-confidence. Overall, the findings clearly indicate a positive relationship between self-confidence and academic achievement among senior secondary school students.



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com ISSN: 2250-3552

5. EDUCATIONAL IMPLICATIONS

The findings of the present study have important educational implications for teachers, parents, school counsellors, and educational administrators. Since self-confidence was found to have a significant positive relationship with academic achievement, schools should make conscious efforts to develop students' self-confidence through a supportive and encouraging learning environment. Teachers should adopt learner-centred teaching methods, provide positive reinforcement, appreciate students' efforts, and encourage active classroom participation to enhance students' confidence. Special attention should be given to students with low self-confidence through guidance, counselling, mentoring, and remedial support. As female students were found to perform better in both academic achievement and self-confidence, appropriate motivational programmes may be designed to improve the confidence and academic performance of male students. Schools should also organize personality development programmes, communication skills workshops, leadership activities, debates, seminars, and co-curricular activities to strengthen students' self-confidence. Parents should provide emotional support, avoid unnecessary comparison, and encourage independent decision-making to foster confidence among their children. The findings may also assist curriculum planners and policymakers in incorporating confidence-building activities into school education for the holistic development of learners.

6. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are suggested:

1. Schools should organize regular confidence-building programmes, personality development workshops, and motivational sessions for senior secondary school students.
2. Teachers should create a positive classroom environment that encourages active participation, independent thinking, and constructive feedback.
3. School counsellors should identify students with low self-confidence and provide appropriate counselling and guidance services.
4. Parents should motivate and encourage their children by appreciating their efforts and avoiding negative comparisons with others.
5. Schools should promote participation in co-curricular and extracurricular activities to enhance students' confidence and leadership skills.
6. Educational administrators should provide training programmes for teachers on strategies to improve students' self-confidence and academic performance.
7. Similar studies may be conducted on larger samples covering different educational boards, states, and socio-economic backgrounds.



International Journal of Engineering, Science and Humanities

An international peer reviewed, refereed, open-access journal
Impact Factor 8.3 www.ijesh.com **ISSN: 2250-3552**

8. Future researchers may investigate the relationship between academic achievement and other psychological variables such as self-esteem, academic self-efficacy, emotional intelligence, resilience, achievement motivation, and study habits.

REFERENCES

1. Al-Haddad, S. S., Afari, E., Khine, M. S., & Yao, J. (2023). Self-regulation, self-confidence, and academic achievement on assessment conceptions: An investigation study of pre-service teachers. *Journal of Applied Research in Higher Education*, 15(3), 813–830.
2. Al-Hebaish, S. M. (2012). The correlation between general self-confidence and academic achievement in the oral presentation course. *Theory and Practice in Language Studies*, 2(1), 60–65. <https://doi.org/10.4304/tpls.2.1.60-65>
3. Chang, J. C., Wu, Y. T., & Ye, J. N. (2022). A study of graduate students' achievement motivation, active learning, and active confidence based on relevant research. *Frontiers in Psychology*, 13, Article 915770. <https://doi.org/10.3389/fpsyg.2022.915770>
4. Çiftçi, S. K., & Yildiz, P. (2019). The effect of self-confidence on mathematics achievement: The meta-analysis of Trends in International Mathematics and Science Study. *International Journal of Instruction*, 12(2), 683–694. <https://doi.org/10.29333/iji.2019.12243a>
5. Jones, A., & Kim, Y. (2020). The role of academic self-confidence on thriving among international college students in the United States and Canada. *Journal of Underrepresented and Minority Progress*, 4(2), 165–191.
6. Kumar, V., & Sood, Y. (2021). Study of academic achievement of +2 class commerce students in relation to their self-confidence. *Raj Rajeshwari Journal of Psychological and Educational Research*, 5(2), 14–19.
7. Kumari, K., & Biswas, S. (2025). The role of self-confidence in academic success of undergraduate students in Bokaro District. *Bharati International Journal of Multidisciplinary Research and Development*, 159–171.
8. Moneva, J., & Tribunalo, S. M. (2020). Students' level of self-confidence and performance tasks. *Asia Pacific Journal of Academic Research in Social Sciences*, 5(1), 42–48.
9. Ndze, Y. E. (2022). An assessment of self-confidence as a determinant of students' academic achievements in the University of Bamenda. *International Journal of Research and Innovation in Social Science*, 6(8), 544–549.
10. Rezaei, A. (2012). Can self-efficacy and self-confidence explain Iranian female students' academic achievement? *Gender and Education*, 24(4), 393–409. <https://doi.org/10.1080/09540253.2011.630314>
11. Tripathy, D. M., & Srivastava, S. K. (2012). To study the effect of academic achievement on the level of self-confidence. *International Journal of Yoga and Allied Sciences*, 1(1), 33–45.
12. Watson, P. W. S. J., Sotardi, V. A., Park, J., & Roy, D. (2021). Gender self-confidence, scholastic stress, life satisfaction, and perceived academic achievement for adolescent New Zealanders. *Journal of Adolescence*, 88, 120–133. <https://doi.org/10.1016/j.adolescence.2021.02.009>