Self-Esteem among Higher Secondary School Students

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Abstract

This study examined self-esteem among higher secondary school students in Himatnagar taluka, focusing on differences related to gender and academic stream (arts vs. science). The research addresses a gap in existing literature by exploring the influence of academic streams on self-esteem in the Indian context. A sample of 120 students (60 boys, 60 girls; 60 arts, 60 science) was selected using purposive sampling. The Self-Esteem Scale (Dhar & Dhar, 2015) was administered to assess self-esteem levels. A two-way ANOVA was conducted to analyze the data. Results revealed no statistically significant difference in self-esteem between boys and girls (F = 0.318, P > 0.05). However, a significant difference was found between arts and science students (F = 4.849, P < 0.05), with science students demonstrating higher self-esteem levels (M = 94.767) compared to arts students (M = 91.317). No significant interaction effect was observed between gender and academic stream (F = 2.124, P > 0.05). These findings suggest that while gender does not significantly influence self-esteem in this population, the choice of academic stream may be associated with varying levels of self-esteem. This study contributes to our understanding of self-esteem dynamics in higher secondary education, particularly in the Indian educational context, and may have implications for student support services and academic counseling.

Keywords: Self-esteem, Higher secondary students, Gender differences, Academic streams, Adolescence

Introduction

Adolescence is undeniably a significant and pivotal stage in an individual's life. It encompasses an array of transformations that take place on multiple fronts, including physical, behavioral, cognitive and emotional aspects. This phase is characterized by an intense and often tumultuous period of growth and development. In the dynamic landscape of adolescence, self-esteem and psychological well-being emerges as a critical factor. An adolescent, according to the World Health Organization (WHO), is defined as an individual who falls within the age range of 10 to 19 (Csikszentmihalyi, M. 2023).

"Self-esteem is the degree to which the qualities and characteristics contained in one's self-concept are perceived to be positive" (APA, 2023).

Self-esteem, a cornerstone of psychological well-being, takes on particular significance during the tumultuous years of adolescence. For higher secondary school students, who stand at the crossroads of childhood and adulthood, self-esteem can profoundly shape their academic performance, social relationships, and future aspirations. This critical period of development is marked by rapid physical changes, evolving social dynamics, and increasing academic pressures, all of which can significantly impact a student's sense of self-worth (Bleidorn et al., 2016).

Self-esteem consists of two separate dimensions: competence and worth. The competence dimension, also known as efficacy-based self-esteem, relates to how capable and efficacious individuals see themselves. The worth dimension, also known as worth-based self-esteem, pertains to how much value individuals perceive themselves to have (Cast and Burke, 2002).

Self-esteem can be classified into various types depending on its stability and origin. Some classifications include global versus specific self-esteem, high versus low self-esteem, explicit versus implicit self-esteem, secure versus fragile self-esteem, and more.

This study focuses on higher secondary school students as they are at a critical juncture in their academic and personal development. The transition from secondary to higher secondary education often coincides with important decisions about future career paths and educational pursuits, making this group particularly relevant for studying self-esteem in an academic context.

Review of Literature

Self-esteem has been a topic of considerable interest in educational psychology, particularly concerning its role in adolescent development and academic performance. This review examines recent literature on self-esteem among higher secondary school students.

The relationship between self-esteem and academic performance among high school students has been studied in several studies. For instance, Arshad et al. (2015) conducted a study on Self-Esteem & Academic Performance among University Students in Pakistan. A total of 80 students, consisting of 40 male and 40 female students, were chosen through purposive sampling from G.C University Faisalabad, using the Rosenberg Self-Esteem Scale. They observed that there is a significant positive correlation between self-esteem and academic achievement. Male students scored significantly higher on self-esteem compared to female students. Female students scored significantly higher on academic performance compared to male students.

However, the relationship between self-esteem and academic performance isn't always straight-forward. Baumeister et al. (2003) cautioned against assuming a simple causal relationship, arguing that high self-esteem doesn't necessarily lead to better grades. They suggested that other factors, such as prior academic achievement, might influence both self-esteem and subsequent performance.

Gender differences in self-esteem among adolescents have been noted in several studies. Bleidorn et al. (2016) conducted a large-scale cross-cultural study on age and gender differences in self-esteem. The sample included a large group of 985,937 men and women who submitted personality and demographic information online. Data was gathered from July 1999 to December 2009. Self-esteem was assessed via self-report using the Single-Item Self-Esteem scale. The results show that while self-esteem increased for both genders during adolescence, boys consistently reported higher self-esteem than girls. This gender gap was particularly pronounced in Western countries.

The impact of self-esteem on mental health outcomes in higher secondary school students has been another area of focus. Sowislo & Orth (2013) conducted a meta-analysis of longitudinal studies, concluding that low self-esteem predicted depression and anxiety. This highlights the potential long-term consequences of poor self-esteem during the crucial developmental stage of higher secondary education.

While existing research provides valuable insights into self-esteem among adolescents, there remains a gap in understanding how academic streams (arts vs. science) may influence self-esteem levels, particularly in the Indian context. This study aims to address this gap by examining self-esteem differences not only across genders but also between arts and science streams in higher secondary education.

Method

Statement of the Problem

The aim of the present study is to study self-esteem among higher secondary school students.

Objectives

- To identify and compare the difference between boys and girls of higher secondary school students regarding their self-esteem.
- To identify and compare the difference between arts and science higher secondary school students regarding their self-esteem.
- To identify and compare the interaction effect of gender and academic stream among higher secondary school students regarding their self-esteem.

Hypothesis

- 1. There is no significant mean difference between boys and girls of Higher secondary school students with regards to their self-esteem.
- 2. There is no significant mean difference between arts and science higher secondary school students with regards to their self-esteem.
- 3. There is no significant interaction effect with reference to gender and academic stream of higher secondary school students with regards to their self-esteem.

Variables

- Independent variables: Gender (Boys & Girls), academic stream (Arts & Science).
- Dependent variables: Self-esteem

Sample

The current study comprises a total sample of 120 students from high secondary schools in the arts and science departments in the Himatnagar taluka of Sabarkantha district. The sample comprised a total of 120 students, evenly distributed as follows: 60 boys (30 from arts stream, 30 from science stream) 60 girls (30 from arts stream, 30 from science stream) This balanced distribution allows for meaningful comparisons across both gender and academic streams. The selection of the sample was done using a purposive sampling method.

Tool

Self-Esteem Scale (SES) - The 5-point Self-Esteem Scale (SES) created by Dr. Santosh Dhar and Dr. Upinder Dhar in 2015 was utilized to assess self-esteem. Respondents are required to answer the statements using the options of strongly disagree, disagree, not sure, agree, and strongly agree, as there are no correct or incorrect answers. The answer format for this is: Strongly Disagree = 1, Disagree = 2, Not sure = 3, Agree = 4 and Strongly Agree = 5. The scale demonstrates a reliability coefficient of 0.87.

Procedure

This study examined self-esteem among 120 higher secondary school students from Himatnagar taluka, selected through purposive sampling. The sample comprised 60 boys and 60 girls students, evenly distributed between arts and science streams (30 students in each category). After obtaining the necessary permissions from school authorities, the researchers administered the self-esteem scale to the students. Participants were informed about the study's rationale and assured of confidentiality. The scale administration took approximately 5 to 10 minutes per student, with researchers present to provide clarification if needed. Informed consent was obtained from all participants, who were assured that their responses would be used only for research purposes.

The collected data was then organized and prepared for statistical analysis to examine differences in self-esteem based on gender and academic stream.

Statistical Analysis

The raw scores obtained from the assessment in the current study are initially recorded and saved in an MS Excel spreadsheet before being transferred to SPSS software for analysis. The software was utilized to perform an analysis of variance (ANOVA) at a significance level of 0.05. To examine the differences in self-esteem based on gender and academic stream (arts vs. science), a two-way Analysis of Variance (ANOVA) was conducted. This analysis allowed for the assessment of the main effects of gender and academic stream, as well as their potential interaction effect on self-esteem scores.

Results and Discussion

Table 1 – showing Analysis of variance (ANOVA) for Self-esteem in relation to Gender and Academic stream.

Source of Variation	Sum of Square	df	Mean Sum of Square	F	Sig.
Gender (A)	23.408	1	23.408	0.318	0.05 (NS)
Academic Stream (B)	357.075	1	357.075	4.849	0.05 (S)
A×B	156.408	1	156.408	2.124	0.05 (NS)
Error	8541.900	116	73.637		
Total	1047889.000	120			
Corrected Total	9078.792	119			

Note: NS = Not Significant, S = Significant

- Significant Level of 'F' Value
 - > 0.05 Level 3.89 (df=1), 0.05 Level 3.04 (df=2)
 - > 0.01 Level 6.76 (df=1), 0.01 Level 4.71 (df=2)

Main Effect

From table 1, we can observe that the calculated F-score for the gender variable (0.318) is lower than the critical F-value (3.89), indicating that there is no statistically significant difference between genders in relation to the variable under investigation. On the other hand, the calculated F-score for the academic stream variable (4.849) exceeds the critical F-value (3.89), suggesting that there is indeed a statistically significant difference between academic stream groups with respect to the variable being studied.

Ho₁: - There is no significant mean difference between boys and girls of Higher secondary school students with regards to their self-esteem.

Table 2 – showing	'F' score	ot gender	with regard	to self-este	em.

Gender (A)	N	Mean Score	F	Sig.
Boys (A ₁)	60	92.600	0.318	0.05 (NS)
Girls (A ₂)	60	93.483		, ,

From table 2, we can observe that F score for gender variable is 0.318, which indicates that there is no significant difference between boys and girls on self-esteem. Table 2 shows that The mean score of the girls' group is slightly higher at 93.483 compared to the boys' group at 92.600. Based on this analysis, it is clear that while girls scored slightly higher on average, the difference in mean scores between boys and girls is not statistically significant. Thus, we accept the first null hypothesis (Ho₁).

Ho₂: - There is no significant mean difference between arts and science Higher secondary school students with regards to their self-esteem.

Table 3 – showing 'F' score of academic stream with regard to self-esteem.

Academic Stream (B)	N	Mean Score	F	Sig.
Arts (B ₁)	60	91.317	4.849	0.05 (S)
Science (B ₂)	60	94.767		, ,

From table 3, we can observe that the F score for the academic stream variable is 4.849, which indicates that there is a significant difference between arts and science in terms of self-esteem. Table 2 shows that the science group has a higher mean score (94.767) compared to the arts group (91.317). According to this analysis, science stream students achieved a significantly higher mean score compared to arts students. The difference in mean scores between arts and science students is statistically significant, leading us to reject the second null hypothesis (Ho2).

Interaction effect

Ho₃: - There is no significant interaction effect with reference to gender and academic stream of higher secondary school students with regards to their self-esteem.

Table 4 – showing interaction effect of gender and academic stream (A x B) with regard to selfesteem.

Academic	Gender (A)		F	Sig.
Stream (B)	Boys (A1)	Girls (A2)		S

Arts (B1)	89.73	92.90	2.124	0.05 (NS)
Science (B2)	95.47	94.07		

It can be seen in Table 4 that the F ratio for the interaction effect between gender and academic stream is 2.124, which is not statistically significant at the 0.05 level. Table 4 shows the mean score of arts boys is 89.73, arts girls is 92.90, science boys is 95.47, and science girls is 94.07. There are observable differences in mean scores between genders and faculties. Despite these differences, the interaction effect between academic stream and gender is not statistically significant. Thus, we accept the third null hypothesis (Ho3).

Conclusion

This study investigated the differences in self-esteem among higher secondary school students, focusing on the variables of gender and academic stream (arts vs. science). The findings reveal several important insights:

- 1. Gender and Self-Esteem: No statistically significant difference was found between male and female students in terms of self-esteem. Although female students showed a slightly higher mean score (93.483) compared to male students (92.600), this difference was not significant enough to reject the null hypothesis.
- 2. Academic stream and Self-Esteem: A statistically significant difference was observed between arts and science stream students. Science students demonstrated higher self-esteem levels with a mean score of 94.767, compared to arts students with a mean score of 91.317. This finding suggests that the choice of academic discipline may be associated with varying levels of self-esteem among higher secondary school students.
- 3. Interaction Effect: Despite observable differences in mean scores across gender and academic stream combinations, no statistically significant interaction effect was found between gender and academic stream on self-esteem levels.

These results contribute to our understanding of self-esteem dynamics in higher education settings. While gender does not appear to play a significant role in self-esteem levels, the choice of academic discipline (arts vs. science) seems to be associated with differences in self-esteem. This finding may have implications for student support services and academic counseling in universities.

Further research is recommended to explore the factors contributing to higher self-esteem levels among science students and to investigate whether this trend is consistent across different educational institutions and cultural contexts. Additionally, longitudinal studies could provide insights into how self-esteem levels may change over the course of a student's academic journey in different disciplines.

Limitations and Future Directions

This study, while providing valuable insights, has certain limitations. The sample was drawn from a single taluka, which may limit generalizability. Future research could benefit from a larger, more diverse sample across multiple regions. Additionally, a longitudinal study could help understand how self-esteem evolves over time in different academic streams. Future studies might also explore other factors that could influence self-esteem, such as socioeconomic background, parental education, or academic performance.

References

- American Psychological Association. (2023). *APA Dictionary of Psychology*. Retrieved from https://dictionary.apa.org/
- Arshad, M., Zaidi, S. M. I. H., & Mahmood, K. (2015). Self-esteem & academic performance among university students. *Journal of Education and Practice*, 6(1), 156-162.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1-44.
- Bleidorn, W., Arslan, R. C., Denissen, J. J., Rentfrow, P. J., Gebauer, J. E., Potter, J., & Gosling, S. D. (2016). Age and gender differences in self-esteem—A cross-cultural window. *Journal of Personality and Social Psychology*, 111(3), 396-410. https://doi.org/10.1037/pspp0000078
- Cast, Alicia & Burke, Peter. (2002). A Theory of Self-Esteem. *Social Forces*. 80. 1041-1068. DOI: 10.1353/sof.2002.0003.
- Csikszentmihalyi, M. (2023, December 17). *adolescence*. Encyclopedia Britannica. https://www.britannica.com/science/adolescence
- Dhar, Santosh & Dhar Upinder. (2015). Manual for Self-Esteem Scale.
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213-240.