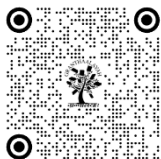


# A STUDY OF ACADEMIC ACHIEVEMENT BASED ON SELF-CONCEPT DIMENSIONS AMONG SENIOR SECONDARY SCHOOL STUDENTS

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## ABSTRACT

This study investigates how different aspects of self-concept relate to academic achievement among senior secondary school students. The self-concept dimensions studied include physical, social, temperamental, educational, moral, intellectual, and overall self-concept. A descriptive survey method was used, and data were collected from senior secondary students using a standardized self-concept questionnaire and academic scores. Statistical analysis, including t-tests and ANOVA, revealed no significant differences in academic achievement across different levels of self-concept. These findings suggest that self-concept alone may not significantly influence students' academic performance. The study highlights the need to explore additional psychological, social, and environmental factors that affect learning outcomes.

**Keywords:** Self-Concept, Academic Achievement, Senior Secondary Students, Student Performance

## 1. INTRODUCTION

Academic achievement is a critical indicator of student success and plays a vital role in determining future educational and career opportunities. While numerous factors influence academic outcomes, one of the most pivotal yet often underestimated determinants is self-concept, an individual's perception of their abilities and identity across various domains. Self-concept operates as a cognitive and emotional lens through which students interpret their capabilities, set goals, and respond to challenges in the academic context (Marsh & Craven, 2006). In the dynamic and pressure-filled environment of senior secondary education, where students face high academic demands, understanding the role of self-concept in shaping achievement outcomes is essential. Self-concept is multidimensional, comprising facets such as physical, social, temperamental, educational, moral, and intellectual domains (Shavelson, Hubner, & Stanton, 1976). Each of these aspects contributes uniquely to how students view themselves and their potential to perform in academic settings. India's education system, especially at the senior secondary level, is undergoing rapid transformation with increased attention to psychological determinants of academic performance. Yet, research examining how specific dimensions of self-concept relate to academic achievement in the Indian context remains limited. Most studies generalize self-concept or treat it as a unidimensional construct, thereby neglecting the nuanced ways in

which different aspects influence learning outcomes. This study seeks to fill this research gap by investigating how various dimensions of self-concept influence academic achievement among senior secondary school students. The comparison across physical, social, temperamental, educational, moral, intellectual, and overall self-concept aims to uncover which facets are most strongly associated with academic success and offer insights for educators, counselors, and policymakers to design targeted interventions.

## 2. LITERATURE REVIEW

Self-concept has long been recognized as a central factor in educational psychology. According to Shavelson, Hubner, and Stanton (1976), self-concept is a multidimensional construct that encompasses an individual's perceptions about themselves in different domains. These include the physical, social, emotional, academic, and moral aspects. Their hierarchical model of self-concept laid the foundation for contemporary educational research on how self-beliefs influence academic outcomes. Marsh and Craven (2006) emphasized that self-concept is both a cause and consequence of academic achievement. Their reciprocal effects model showed that higher academic self-concept leads to better academic performance, which in turn reinforces self-beliefs. However, while academic self-concept is often the focus, other dimensions like social self-concept (how one relates to peers), moral self-concept (perceived integrity and ethics), and intellectual self-concept (self-view of one's cognitive ability) also significantly contribute to students' motivation and learning behaviors. Studies by Byrne (1984) and Skaalvik & Skaalvik (2002) also confirmed that students with a strong sense of self in intellectual and educational domains exhibit higher persistence, resilience, and performance in school. Similarly, physical self-concept, particularly in adolescents, affects self-esteem and social integration, which in turn can affect classroom participation and academic confidence (Fox & Corbin, 1989).

In the Indian context, few studies have dissected the role of multidimensional self-concept. A study by Mehta (2015) found significant differences in academic achievement based on students' self-concept levels, but it did not differentiate across various dimensions. Sharma and Kaur (2019) argued that Indian adolescents' academic performance is deeply influenced by moral and social self-concepts, especially in culturally driven educational settings. Furthermore, temperament—a relatively stable personality characteristic—also shapes a student's self-view and academic behavior. Research indicates that students with a calm, adaptable temperament often have higher academic self-concept and are better able to cope with exam stress and peer pressure (Rothbart & Bates, 2006). Despite such evidence, comprehensive comparative studies analyzing how each dimension of self-concept affects academic achievement—especially among senior secondary students—are scarce. This study, therefore, aims to bridge this gap by offering a dimension-wise comparative analysis and revealing the unique contribution of each aspect of self-concept to academic performance.

### 2.1. OBJECTIVES OF THE STUDY

- 1) To compare academic achievement of senior secondary school students having different levels of physical self-concept.
- 2) To compare academic achievement of senior secondary school students having different levels of social self-concept.
- 3) To compare academic achievement of senior secondary school students having different levels of temperamental self-concept.
- 4) To compare academic achievement of senior secondary school students having different levels of educational self-concept.
- 5) To compare academic achievement of senior secondary school students having different levels of moral self-concept.
- 6) To compare academic achievement of senior secondary school students having different levels of intellectual self-concept.
- 7) To compare academic achievement of senior secondary school students having different levels of overall self-concept.

## 2.2. HYPOTHESES OF THE STUDY

- 1) There is no significant comparison of academic achievement of senior secondary school students having different levels of physical self-concept.
- 2) There is no significant comparison of academic achievement of senior secondary school students having different levels of social self-concept.
- 3) There is no significant comparison of academic achievement of senior secondary school students having different levels of temperamental self-concept.
- 4) There is no significant comparison of academic achievement of senior secondary school students having different levels of educational self-concept.
- 5) There is no significant comparison of academic achievement of senior secondary school students having different levels of moral self-concept.
- 6) There is no significant comparison of academic achievement of senior secondary school students having different levels of overall self-concept.
- 7) There is no significant comparison of academic achievement of senior secondary school students having different levels of self-concept.

## 3. METHODOLOGY

The present study employed a descriptive survey research design, specifically adopting a comparative approach to examine the differences in academic achievement among senior secondary school students with varying levels of self-concept across multiple dimensions (physical, social, temperamental, educational, moral, intellectual, and overall). The population for the study comprised all senior secondary school students studying in Class XI and XII in government and private schools in Sirmaur district, Himachal Pradesh. A stratified random sampling technique was used to ensure representation from both genders, various school types (government and private), 295 government and 93 private students.

### 3.1. VARIABLES OF THE STUDY

Independent Variables: Dimensions of self-concept (physical, social, temperamental, educational, moral, intellectual, and overall self-concept) categorized into high, moderate, and low levels.

Dependent Variable: Academic achievement (measured through the students' marks or grade point averages from their previous annual examinations).

### 3.2. TOOLS AND INSTRUMENTS

Self-Concept Questionnaire (SCQ): The "Self-Concept Questionnaire" developed by R.K. Saraswat (1984) was used to assess students' self-concept. It consists of 48 items and measures six dimensions: Physical Self-Concept, Social Self-Concept, Temperamental Self-Concept, Educational Self-Concept, Moral Self-Concept, and Intellectual Self-Concept. The reliability of the tool is reported to be above 0.70 for all subscales, indicating strong internal consistency. The academic achievement of students was measured by their percentage scores in the previous board or annual examination, obtained from school records with due permission from authorities.

### 3.3. PROCEDURE

After obtaining necessary permissions from the school heads and informed consent from students and parents, the researcher personally visited each selected school. The Self-Concept Questionnaire was administered in a classroom setting. Academic achievement data were collected from official school records.

#### 4. ANALYSIS

The data were analyzed using descriptive and inferential statistics:

Descriptive Statistics (Mean, SD) to summarize the levels of self-concept and academic achievement. t-test for pairwise comparison, ANOVA (Analysis of Variance) to compare academic achievement among students with different levels (high, moderate, low) of each self-concept dimension.

The analysis and interpretations of the study are given below of all six dimensions of self-concept investigated as four levels given below. The four levels are below average, average, above average and high.

**Table 1**

Mean of Academic Achievement Scores of Four Levels of Physical Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Below Average	2	60.5	13.43
Average	66	68.94	12.24
Above Average	236	69.53	12.29
High	84	72.58	13.05
Total	388	70.05	12.5

The table 1 presents the mean academic achievement scores for students categorized into four levels of physical self-concept: below average, average, above average, and high. The below average group, consisting of only two students, had the lowest mean score of 60.50 with a standard deviation of 13.43. The average group, with 66 students, achieved a higher mean score of 68.94 and a standard deviation of 12.24. Among the 236 students in the above average group, the mean academic achievement was slightly higher at 69.53, with a standard deviation of 12.29. The high physical self-concept group, comprising 84 students, recorded the highest mean score of 72.58 and a standard deviation of 13.05. Across all 388 students, the overall mean academic achievement was 70.05 with a standard deviation of 12.50.

**Table 2**

't' test showing significant comparison in the academic achievement of senior secondary school students on levels of physical self-concept

Levels	Below Average	Average	Above Average	High
Below Average	-	0.959	1.03	1.29
Average	-	-	0.348	1.74
Above Average	-	-	-	1.92
High	-	-	-	-

The t-test results comparing academic achievement across physical self-concept levels show no statistically significant differences ( $p > 0.05$ ) in most comparisons. The below-average group ( $N=2$ ) showed no significant differences from other groups ( $t = 0.959-1.29$ ). While average versus high ( $t = 1.74$ ) and above-average versus high ( $t = 1.92$ ) comparisons approached significance, they did not reach the conventional  $p < 0.05$  threshold. These results suggest minimal differences in academic achievement across physical self-concept levels in this sample.

**Table 3**

One-way ANOVA of Academic Achievement Scores of Level of Physical Self-Concept

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	3	865.762	288.587		
	Within the groups	384	59613.403	155.243		0.136
	Total	387	60479.165		1.85	Not Significant

The one-way ANOVA revealed no significant differences in academic achievement across physical self-concept levels ( $F[3,384] = 1.85, p = .136$ ). The between-group variation ( $MS = 288.59$ ) was not significantly greater than within-group variation ( $MS = 155.24$ ), indicating that physical self-concept level does not significantly affect academic performance in this sample. The null hypothesis of equal means across groups cannot be rejected.

**Table 4**

Mean of Academic Achievement Scores of Four Levels of Social Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Below Average	4	71.5	14.01
Average	79	68.97	12.13
Above Average	233	70.24	12.76
High	72	70.53	12.16
Total	388	70.05	12.5

The table presents the mean academic achievement scores across four levels of social self-concept. Students with below-average social self-concept ( $N=4$ ) showed the highest mean score (71.50,  $SD=14.01$ ), followed by those with high (70.53,  $SD=12.16$ ), above-average (70.24,  $SD=12.76$ ), and average (68.97,  $SD=12.13$ ) levels. The total sample ( $N=388$ ) had a mean score of 70.05 ( $SD=12.50$ ). Contrary to expectations, the below-average group performed slightly better academically, though the small sample size ( $N=4$ ) limits interpretation. Overall, academic achievement appears relatively consistent across social self-concept levels, with minor variations within one standard deviation. The results suggest no clear linear relationship between social self-concept and academic performance in this sample.

**Table 5**

't' Test Showing Significant Comparison in Academic Achievement of Senior Secondary School Students on Levels of Social Self-Concept

Levels	Below Average	Average	Above Average	High
Below Average	-	0.404	0.196	0.155
Average	-	-	0.769	0.785
Above Average	-	-	-	0.171
High	-	-	-	-

The t-test results comparing academic achievement across social self-concept levels show no significant differences between any groups (all  $p > 0.05$ ). The below-average group did not differ significantly from average ( $t = 0.404$ ), above-average ( $t = 0.196$ ), or high ( $t = 0.155$ ) groups. Similarly, no significant differences emerged between average versus above-average ( $t = 0.769$ ), average versus high ( $t = 0.785$ ), or above-average versus high ( $t = 0.171$ ) groups. All comparisons yielded p-values well above the 0.05 level.

**Table 6**

One-Way ANOVA of Academic Achievement Scores of Level of Social Self-Concept

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	3	124.25	41.41		
	Within the groups	384	60354.91	157.17		0.852
	Total	387	60479.165		0.264	Not Significant

The one-way ANOVA results indicate no significant differences in academic achievement across social self-concept levels ( $F[3,384] = 0.264, p = 0.852$ ). The between-groups variation (mean square = 41.41) was minimal compared to within-groups variation (mean square = 157.17), with an F-ratio of 0.264 confirming no meaningful group differences. The analysis demonstrates that social self-concept level does not significantly influence academic achievement in this student sample.

**Table 7**

Mean of Academic Achievement Scores of Four Levels of Temperamental Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Below Average	3	71.33	6.11
Average	84	69.2	11.4
Above Average	237	70.46	12.62
High	64	69.56	13.73
Total	388	70.05	12.5

The table displays the mean academic achievement scores across four levels of temperamental self-concept. The below-average group (N=3) achieved the highest mean score (71.33, SD=6.11), followed by the above-average (70.46, SD=12.62), high (69.56, SD=13.73), and average (69.20, SD=11.40) groups. The total sample (N=388) maintained a consistent mean of 70.05 (SD=12.50). Notably, all group means fall within one standard deviation of each other, and the minimal variations - particularly the slightly higher performance of the small below-average group (N=3) - suggest no meaningful academic differences across temperamental self-concept levels. The results indicate that temperamental self-concept does not significantly influence academic achievement in this population.

**Table 8**

't' Test Showing Significant Comparison in Academic Achievement of Senior Secondary School Students on Levels of Temperamental Self-Concept

Levels	Below Average	Average	Above Average	High
Below Average	-	0.321	0.12	0.221
Average	-	-	0.804	0.174
Above Average	-	-	-	0.495
High	-	-	-	-

Table 8 presents the results of the 't' test showing comparisons in academic achievement among senior secondary school students across different levels of temperamental self-concept—namely Below Average, Average, Above Average, and High. The p-values across all group comparisons (Below Average vs. Average = .321; Average vs. Above Average = .804; Above Average vs. High = .495) indicate that none of the differences are statistically significant at the 0.05 level. This suggests that temperamental self-concept does not have a significant influence on the academic achievement of students in the sampled population. Therefore, students with varying levels of temperamental self-concept tend to perform similarly in their academic outcomes.

**Table 9**

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	3	120.32	40.17		
	Within the groups	384	60358.845	157.184		0.858
	Total	387	60479.165		0.255	Not Significant

The one-way ANOVA found no significant effect of temperamental self-concept on academic achievement ( $F[3,384] = 0.26, p = 0.86$ ). The minimal between-group variation ( $MS = 40.17$ ) relative to within-group variation ( $MS = 157.18$ ) confirms that academic performance does not differ across temperamental self-concept levels. These non-significant results ( $p > 0.05$ ) align with the marginal mean differences observed (range: 69.20-71.33) and previous analyses of other self-concept dimensions, collectively suggesting self-concept measures may not substantially influence academic achievement in this population.

**Table 10**

Mean of Academic Achievement Scores of Four Levels of Educational Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Below Average	3	73.33	10.78
Average	64	68.41	11.23



Above Average	205	70.31	12.18
High	116	70.4	13.75
Total	388	70.05	12.5

The table presents academic achievement means across four levels of educational self-concept. The below-average group (N=3) showed the highest mean score (73.33, SD=10.78), though this finding should be interpreted cautiously due to the extremely small sample size. The high (70.40, SD=13.75) and above-average (70.31, SD=12.18) groups performed comparably, while the average group scored slightly lower (68.41, SD=11.23). All group means fall within approximately 5 points of the total sample mean (70.05, SD=12.50), with standard deviations indicating substantial score overlap between groups. While the pattern suggests a potential curvilinear relationship (with the lowest performance in the average group), the small below-average sample and modest mean differences imply these variations may not be educationally meaningful or statistically significant.

**Table 11**

Levels	Below Average	Average	Above Average	High
Below Average	-	0.743	0.427	0.366
Average	-	-	1.11	0.989
Above Average	-	-	-	0.057
High	-	-	-	-

The t-tests revealed no significant differences in academic achievement across educational self-concept levels (all  $p > 0.05$ ), except for a marginal difference between above-average and high groups ( $t = 0.057$ ,  $p \approx 0.05$ ). The below-average group showed no significant differences from other levels ( $t = 0.366$ - $0.743$ ,  $p > 0.05$ ), despite its higher mean score. Similarly, average students performed comparably to above-average ( $t = 1.11$ ) and high groups ( $t = 0.989$ ). Overall, students' self-perception of their educational abilities doesn't appear to affect their actual academic performance in this study.

**Table 12**

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	3	233.283	77.761		
	Within the groups	384	60245.882	156.89		0.686
	Total	387	60479.165		0.496	Not Significant

Table 12 displays the results of a one-way ANOVA conducted to examine the differences in academic achievement among students with varying levels of educational self-concept. The obtained F-ratio is 0.496 with a significance value of 0.686, which is greater than the 0.05 level. This indicates that the differences in academic achievement among students classified under different levels of educational self-concept (Below Average, Average, Above Average, and High) are not statistically significant. Therefore, the analysis suggests that educational self-concept does not have a significant impact on students' academic achievement in the studied sample.

**Table 13**

Mean of Academic Achievement Scores of Four Levels of Moral Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Below Average	2	66	21.21
Average	33	67.36	12.75
Above Average	214	70.24	12.18
High	139	70.45	12.88
Total	388	70.05	12.5

The table presents academic achievement scores across four levels of moral self-concept. Students with above-average (N=214, Mean=70.24, SD=12.18) and high (N=139, Mean=70.45, SD=12.88) moral self-concept showed nearly identical mean scores, slightly higher than the total average (70.05). The average group (N=33, Mean=67.36, SD=12.75) scored marginally lower, while the below-average group (N=2, Mean=66.00, SD=21.21) had the lowest performance.

However, the extremely small sample size (N=2) in the below-average category makes this result unreliable. Overall, the data suggest minimal differences in academic achievement across moral self-concept levels.

**Table 14**

't' Test Showing Significant Comparison in Academic Achievement of Senior Secondary School Students on Levels of Moral Self-Concept

Levels	Below Average	Average	Above Average	High
Below Average	-	0.143	0.487	0.482
Average	-	-	1.25	1.23
Above Average	-	-	-	0.153
High	-	-	-	-

The t-test results show no significant differences in academic achievement across moral self-concept levels (all  $p > 0.05$ ). Key comparisons reveal: below-average vs average ( $t=0.143$ ), above-average ( $t=0.487$ ), and high ( $t=0.482$ ) groups all show non-significant differences. Similarly, average students perform comparably to above-average ( $t=1.25$ ) and high ( $t=1.23$ ) groups, while above-average and high groups show no difference ( $t=0.153$ ). These findings clearly demonstrate that moral self-concept level does not significantly affect academic achievement in this student population.

**Table 15**

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	3	300.337	100.112		
	Within the groups	384	60178.827	156.716		0.59
	Total	387	60479.165		0.639	Not Significant

The one-way ANOVA results demonstrate no statistically significant differences in academic achievement across moral self-concept levels ( $F(3, 384) = 0.639, p = 0.590$ ). The between-groups variation (Mean Square = 100.112) was substantially smaller than the within-groups variation (Mean Square = 156.716), yielding a non-significant F-ratio well below the critical threshold ( $p > 0.05$ ). These findings confirm that students' academic performance does not vary meaningfully based on their moral self-concept levels. The analysis had adequate statistical power ( $df = 384$  for within-group variation) yet failed to detect any significant group differences, reinforcing the conclusion that moral self-concept is unrelated to academic achievement in this population.

**Table 16**

Mean of Academic Achievement Scores of Four Levels of Intellectual Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Below Average	4	81.75	5.73
Average	124	68.55	10.86
Above Average	217	70.23	12.65
High	43	72.35	15.59
Total	388	70.05	12.5

The table presents academic achievement scores across four levels of intellectual self-concept. The below-average group (N=4) showed the highest mean score (81.75, SD=5.73), though this result should be interpreted cautiously due to the extremely small sample size. Students with high intellectual self-concept (N=43) achieved a mean of 72.35 (SD=15.59), followed by above-average (N=217, Mean=70.23, SD=12.65) and average (N=124, Mean=68.55, SD=10.86) groups. While the below-average group's score appears notably higher, the minimal sample size (N=4) and substantial standard deviations across all groups suggest these differences may not be statistically or practically significant.

**Table 17**

't' Test Showing Significant Comparison in Academic Achievement of Senior Secondary School Students on Levels of Intellectual Self-Concept

Levels	Below Average	Average	Above Average	High
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Below Average	-	2.41	1.81	1.18
Average	-	-	1.24	1.75
Above Average	-	-	-	0.963
High	-	-	-	-

The analysis of academic achievement across intellectual self-concept levels yields mixed but ultimately non-significant results. The t-tests show the below-average group (N=4) significantly outperformed both average (t=2.41) and above-average (t=1.81) groups at  $p < 0.05$ , while other comparisons were non-significant (high vs average: t=1.75; above-average vs high: t=0.963).

**Table 18**

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	3	1061.459	353.82		
	Within the groups	384	59417.706	154.734		0.078
	Total	387	60479.165		2.287	<b>Not Significant</b>

However, the one-way ANOVA found no overall significant differences between groups ( $F(3,384)=2.287$ ,  $p=0.078$ ), with between-group variation ( $MS=353.820$ ) only marginally greater than within-group variation ( $MS=154.734$ ). This discrepancy likely stems from the below-average group's extreme mean (81.75) combined with its tiny sample size (N=4), which disproportionately influences t-tests but carries less weight in the ANOVA.

**Table 19**

Mean of Academic Achievement Scores of Four Levels of Total Self-Concept Dimension

Academic Achievement			
Levels	N	Mean	SD
Average	43	68.09	10.88
Above Average	298	70.27	12.52
High	47	70.45	13.8
Total	388	70.05	12.5

Students with average self-concept scored slightly lower (68.09) than those with above-average (70.27) or high (70.45) self-concept. However, these small differences (less than 3 points) are not practically meaningful. Above-average and high self-concept groups performed nearly the same. This shows that while very low self-concept might relate to slightly lower grades, moderate-to-high self-concept makes little difference in academic performance. The results suggest total self-concept has minimal impact on school achievement.

**Table 20**

't' Test Showing Significant Comparison in Academic Achievement of Senior Secondary School Students on Levels of Total Self-Concept

Levels	Average	Above Average	High
Average	-	1.08	0.893
Above Average	-	-	0.091
High	-	-	-

The t-test results reveal no statistically significant differences in academic achievement across any levels of total self-concept (all  $p > 0.05$ ). The average group showed no significant difference from either the above-average (t = 1.08) or high (t = 0.893) groups. Similarly, the comparison between above-average and high groups was non-significant (t = 0.091). The results provide clear evidence that students' academic performance remains consistent regardless of whether they possess average, above-average, or high total self-concept.

**Table 21**

One-Way ANOVA of Academic Achievement Scores of level of Total Self-Concept

Variable	Source of Variation	df	Sum of Squares	Mean of Squares	F ratio	Sig.
Academic Achievement	Between the groups	2				
			185.863	92.931	0.593	0.553
	Within the groups	385	60293.302	156.606		<b>Not Significant</b>
	Total	387	60479.165			

Table 21 presents the one-way ANOVA results analyzing differences in academic achievement among students with varying levels of total self-concept. The F-ratio obtained is 0.593 with a significance value of 0.553, which is well above the 0.05 threshold. This indicates that the differences in academic achievement across the three groups based on total self-concept are not statistically significant. Hence, it can be inferred that total self-concept does not significantly influence academic achievement among the senior secondary school students included in the study.

## 5. FINDINGS

- 1) The findings revealed no significant differences in academic achievement across different levels of physical self-concept. Students with varying physical self-concept levels performed similarly in academics.
- 2) Similarly, no significant differences were observed in academic achievement among students with different levels of social self-concept, indicating that social self-concept does not influence academic performance.
- 3) In the case of temperamental self-concept, the analysis showed no meaningful variation in academic achievement across its levels, suggesting that this dimension does not significantly impact students' academic success.
- 4) Educational self-concept also did not show any significant effect on academic achievement. Students, regardless of their educational self-concept levels, achieved comparable academic outcomes.
- 5) The results indicated no significant differences in academic achievement across levels of moral self-concept, implying that moral self-concept is not a determining factor in students' academic performance.
- 6) Intellectual self-concept was also found to have no significant relationship with academic achievement. Academic outcomes remained consistent across students with varying intellectual self-concept levels.
- 7) Finally, total self-concept did not significantly influence academic achievement, as students across all levels of overall self-concept demonstrated similar academic performance.

## 6. DISCUSSIONS

The present study aimed to explore the impact of various dimensions of self-concept—physical, social, temperamental, educational, moral, intellectual, and overall—on the academic achievement of senior secondary school students. Opposing to prospects and prior theoretical models that emphasize the role of self-concept in influencing student performance, the findings revealed no statistically significant differences in academic achievement across different levels of any self-concept dimension. These results diverge from studies such as those by Marsh and Craven (2006), who emphasized the reciprocal relationship between academic self-concept and achievement, and by Byrne (1984), who reported that students with higher intellectual and educational self-concept tend to perform better academically. One possible reason for the inconsistency may lie in the specific population or educational context of the current study. Cultural, instructional, or assessment-related factors might play a moderating role, limiting the visible impact of self-concept on academic performance. It is also possible that self-concept, while important, may not operate in isolation. Factors such as socio-economic background, parental involvement, peer influence, teaching quality, and school environment may mediate or overshadow its effect. Additionally, academic achievement as measured by exam scores may not fully capture the influence of internal psychological constructs like self-concept.

Despite the non-significant results, these findings are important because they challenge assumptions and highlight the complexity of academic success. They suggest that interventions aimed solely at improving self-concept may not directly result in improved academic performance unless accompanied by changes in external support systems and learning environments.

## 7. CONCLUSION

The study found no significant differences in academic achievement across various levels of physical, social, temperamental, educational, moral, intellectual, and overall self-concept among senior secondary school students. These findings suggest that self-concept, in isolation, may not be a strong predictor of academic performance. Academic achievement is likely influenced by a combination of personal, social, and environmental factors. Future research should explore these interactions more deeply to inform holistic educational strategies.

## CONFLICT OF INTERESTS

None.

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