

An Analysis of The Relationship Between Self-Concept And Academic Achievement Among HSC Students In Coimbatore District

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Abstract

The transition to HSC is an important developmental phase characterized by identity formation, making career-related decisions, and being under high stakes academic pressure. In such an environment, psychological issues matter as much in influencing the performance of a student as cognitive aptitude. Of these, self-concept, or a student's own rating of his/her intellectual and learning abilities acts as a major internal driver of perseverance, motivation, and overall academic achievement. The quantitative method was used with the assistance of normed measures like Self Concept Scale (SCS) given to HSC students in Coimbatore district. The findings of this study indicate that self-concept ratings of the pupils in HSC were high while the level of achievement of the pupils was average. Consequently, parents and teachers ought to help their children develop to enhance their performance.

Key words: Academic Achievement; Academic Motivation; Educational Psychology; Higher Secondary Students; Self-Concept.

Introduction

The achievement in academics has been ranked as one of the most significant indicators of educational development and future success of students. Nevertheless, intelligence, memory, or mental capacity alone cannot predict success in school. The contemporary pedagogical psychology underlines that the psychological and emotional aspects are also crucial for the progress in academics of students. Out of these psychological variables, the self concept has received a lot of attention as it determines how students think, behave, interact and perform in learning institutions. Self-concept refers to the way a person views, believes and values himself or herself as well as his or her skills, assets, liabilities and overall value. A favorable self-concept aids students in gaining confidence, motivation, and emotional stability, but unfavorable self-concept could decrease their interest in academic performance and performance (Santrock, 2024).

Educational psychologists have always put across arguments that students who are confident in themselves will tend to engage more in learning processes, cope with academic challenges and perform better. Pajares & Schunk (2001) explain that self-beliefs are very important in influencing the effort, persistence and achievement by students. Students with high self-concept tend to have high levels of confidence when it comes to performing academic activities and are more likely to have positive attitude towards the learning

process. Similarly, Bong & Clark (2019) explained that self-concept and self-efficacy are linked with academic motivation and that it influences learning behaviour and learning aspirations of students. Therefore, self-concept has emerged as a significant construct to explain the academic growth of adolescents.

Higher secondary education is an incredibly vital point in the life of students as it is directly connected with the competition in studies, vocation planning, and psychological adaptation. This is the time when students undergo a fast emotional, social, and intellectual development that can affect their self-perception. Parental expectations, peer relationships, school setting, teacher support and academic pressure are some of the factors that influence the progress of self-concept. Fradesen (1967) has indicated that learning experiences and socialization influence the development of the self-concept of the learners. When students are encouraged and positively reinforced in the environment, chances of them having healthy self-perceptions and confidence in their academic skills increase.

Self-concept and academic achievement are the two concepts that have been extensively debated in the study of education. It has been reported by many studies that students with good self-concept usually perform well academically than students who have low self-concept. Ogunleye & Musa (2021) observed that the academic performance of secondary school students is high when there is self-concept and self-efficacy. In the same way, Adebayo (2020) highlighted that psychological determinants such as motivation, confidence, and self-belief contribute greatly to students' academic success. These results suggest that one cannot comprehend academic performance in totality without taking into account the psychological aspects of students.

The Reciprocal Effects Model developed by Pekrun & Marsh (2022) has been suggested as an important theoretical explanation of this relationship. This model postulates that self-concept and academic achievement affect each other. A student who excels in academics will have a better self-concept and students who have a good self-concept will have a better chance of performing well academically. This two-way association forms a loop where academic achievement leads to self-belief, and more self-belief leads to academic achievement. Nevertheless, this relationship might be stronger or weaker based on social, educational, and environmental circumstances.

Although there has been an increasing interest in self-concept research, gender, locality, and type of schools management differences have been still addressed in the educational studies. Both male and female students can have varying social expectations and emotional experiences that can affect their self concept and performance. Likewise, the rural and urban students are subjected to different educational opportunities, facilities, and social environments. There can also be differences between the government and the private school students because there can be differences in the school climate, teaching practices and support offered by the institutions. To better the educational planning and student development programmes, it is necessary to comprehend how important these variables can be in influential the self-concept and educational presentation.

Thus, the researcher has decided to conduct a study to analyse the relationship between Self Concept and Academic Achievement of HSC students. The study also attempts to see the significant differences between self-concept and academic achievement with regard to gender, locality and type of school management. The study results can assist teachers, parents, counsellors, and educational administrators to perceive the psychological needs of students and establish positive learning conditions that can foster academic achievements as well as healthy self-improvement. The statistical procedures and research methods adopted in the study were based on established educational research principles (Best & Khan, 1997). In addition, the selection, interpretation, and reporting of the measurement instrument were informed by contemporary psychometric recommendations

emphasizing reliability, validity, and transparent reporting (Cheung et al., 2024; Balkin et al., 2024; Tavakol et al., 2024).

Self-concept as an indicator of student development

Self-concept plays a tremendous role in the development of the academic performance, social adjustment and emotional well-being and personal growth of students. Positive self-concept leads to students' high self-confidence and participation in learning activities. Such students are typically more motivated, persistent and committed to attaining their academic objectives. In the higher secondary stage, students face many academic and personal challenges which demand the confidence and self-belief. Having a positive self-concept enables students to deal with examination stress, peer pressure and uncertainties in career effectively. It also helps them to see challenges in school as learning opportunities and not barriers to success.

Schools are a very important factor to help develop positive self-concept in students. Positive teacher-student relationships, positive feedback, and opportunities to engage in curricular and co-curricular experiences help to build healthy self-perceptions. Consequently, students are more involved in academic pursuits and psychologically resilient. Hence, self-concept should be considered as a major component of student development. Building the self-belief of students can not only lead to better academic results, but to their personality development and success in the future.

Need for the Present study

Coimbatore students are in a lot of stress to perform and often to the cost of their mental health, which is why this study is important. The analysis highlights that academic performance does not only involve a combination of hard work but also having the confidence to perform well by looking at how the self-belief (self-concept) of a student can affect his/her performance. The study is significant since it provides teachers and parents with a strong argument as to why they should focus on making students enhance their self-esteem instead of just striving to achieve higher results. Ultimately, it helps to create a more favorable learning environment where students feel capable and motivated to perform better and minimize stress in an intensely competitive district.

Factors influencing self-concept of school students

Various factors that affect the self-concept of the school students includes personal, family, social and educational factors. Parents become a key element in developing the ability and self-concept of children when they give proper encouragement, appreciation and emotional support to children. Peer relations also are significant in the development of self-perceptions during the adolescent years. Pupils are confident and socially competent through positive relationships with friends and classmates. The school context has a significant impact on self-concept development also. Constructive feedback from teachers, recognition of students' achievement and supportive classroom environments help to establish positive self-beliefs. Academic achievement also boosts self-concept as students develop confidence in their abilities. On the other hand, multiple school failures and bad educational experiences can negatively impact the students' self-perceptions. Further, socioeconomic status, access to educational facilities, involvement in co-curricular activities and emotional health can have an impact on the formation of self-concept. It is essential to understand these factors in order to ensure the development of positive self – concept which in turn gives progression in the academic achievement of the students.

Objectives of the Study

Objectives of the present study is to,

1. evaluate the prevailing status of self-concept and scholastic attainment among students pursuing higher secondary education.

2. ascertain whether gender exerts any influence on the self-concept of HSC students.
3. investigate the extent to which residential background (rural and urban) contributes to variations in students' self-concept.
4. analyse the degree of association between students' self-concept and their academic achievement at the higher secondary level.

Hypotheses of the Present Study

1. Gender does not bring about a statistically significant variation in the self-concept of HSC students.
2. The academic attainment of HSC students is independent of gender-based differences.
3. Residential background does not significantly influence the self-concept levels of HSC students.
4. The nature of school management does not produce significant variation in the self-concept of students studying at the HSC level.
5. Students' self-concept is not significantly associated with their academic attainment.

Review of Literature

Self-concept is considered as an important psychological factor that has a great impact on students' behaviour, motivation and academic performance. Educational psychologists have expressed that pupils with positive self-perceptions are more likely to be involved in learning tasks and achieve more positive learning outcomes. Students' experiences in school, family life, peer relationships and emotional adaptation are directly related to the development of self-concept. It is a stepping stone to the development of confidence, self-esteem and a positive attitude to learning. A healthy self-concept is a great motivator for students to engage in classroom activities, put their thoughts forward, and perform difficult academic tasks. As such, self-concept has been identified as one of the important factors in educational achievement and overall student development.

Self-concept is a result of consistent interactions with the educational and social environment according to Fradesen (1967). The author stressed that when a student is encouraged, appreciated and emotionally supported by teachers and parents, he/she is likely to form healthy self-perception and improved self-belief of his/her academic ability. Adolescent education experiences are a major determinant of student attitudes, behaviours and engagement in learning activities. Being positively reinforced by important others can lead to increased confidence and motivation, while negative experiences can have a detrimental impact on self-beliefs. Hence, formation of self-concept is gradual and it is influenced by both academic and social experiences.

Pajares & Schunk (2001) pointed out that self-beliefs have a significant impact over students' academic performance. The authors write that students with good self-concept and confidence are more likely to exhibit high motivation levels, persistence, and commitment to academic activities. They also described how believing and trusting in oneself can help set challenging learning goals and take actions to reach those goals. A positive self-concept is also a factor in positive classroom behavior, interest in learning, and better educational outcomes. The authors concluded that self-beliefs serve as a crucial psychological mechanism that regulates students' learning behaviour and academic performance.

The relationship between self-concept, self-efficacy and academic motivation research have been investigated by Bong & Clark (2019). The results indicated that positive self-concept was linked to higher academic motivation and achievement of students. This is because, as noted by the authors, self-concept affects learning behaviour, goal setting, confidence and the ability to cope effectively with academic challenges. Positive attitudes towards self-confidence make students more enthusiastic and motivated in learning tasks.

The study pointed out that in addition to direct impact on achievement, self-concept impacts a range of motivational processes which, in turn, results in academic achievement.

Adebayo (2020) posited that psychological factors are very significant in the determination of student's academic achievement. The study portrayed that the factors of confidence, motivation and self-concept are important variables that affect the success of secondary school students in learning. It was found that students with positive self-beliefs had higher confidence and positive self-esteem was more likely to be related to better academic performance than was low self-esteem and confidence. The author has pointed out that the attainment of academic success not only lies in the intellectual capabilities of students but is also subject to the psychological readiness of learners. A positive self-concept is characterized by having stronger determination, greater interest in learning and more willingness to face academic difficulties. In addition, such students are further expected to have constructive educational attitude and to persevere at attaining education objectives. The study consequently emphasized the need for the establishment of an educational atmosphere that would help build confidence, motivation and a healthy self-perception among the students.

This study investigated impact of self-efficacy and self-concept on academic achievement of secondary school students by Ogunleye & Musa (2021). They found that the self-concept does have a significant positive impact on the students' achievement in school. Students with higher self-concept were more academically involved, as well as more involved in class and had better educational results. Self-concept is an important psychological resource that can help students to approach academic tasks with confidence and persistence, the authors said. The study also found that positive self-beliefs lead to positive learning behaviour and increased commitment to learning tasks. The researchers stressed that schools need to put in place strategies to boost the confidence and self-perceptions of learners; this can influence their academic achievement and educational growth.

Pekrun & Marsh (2022) proposed the Reciprocal Effects Model that suggests that there is a relationship between self-concept and academic success. This model proposes that the self-concept is related to achievement, and that achievement is related to self-concept, and this relationship can be an ongoing, dynamic process. When students achieve success, they have a positive self-concept and vice versa. This reciprocity forms a positive cycle of achievement leading to self-belief and vice versa. The authors highlighted the importance of considering self-concept as not only a result of academic achievement, but also as a key variable that can impact future educational success. Their research gave solid theoretical bases of the close relationship between psychological development and students' academic success.

Santrock (2024) explained that the self-concept is an important developmental stage for adolescents to develop because they are undergoing significant social, emotional, cognitive, and academic transitions. The author emphasized the significance of constructive teacher–student interaction and supportive educational environments in fostering healthy self-perceptions in adolescents. When teachers encourage and give feedback to students, they are more likely to build up confidence in their capability and keep up a positive attitude towards learning. Santrock also stated that the adolescents with positive self-concept show better adjustment with the academic demands have better social relationship and actively involved in educational activities. Hence, positive self-concept is crucial for academic and psychological well-being of adolescents.

Best & Khan (1997) emphasized the importance of systematic research procedures and appropriate statistical techniques in educational investigations. Contemporary psychometric literature further recommends that research should report the reliability,

validity, and appropriate interpretation of measurement instruments to improve the transparency and credibility of research findings (Cheung et al., 2024; Balkin et al., 2024; Tavakol et al., 2024). These recommendations provide methodological support for studies examining the relationship between self-concept and academic achievement.

The discussion of literature reviewed reveals that self-concept significantly influences academic achievement, motivation, learning behaviour and psychological adjustment of students. Previous studies have reported that positive self-concept is associated with increased academic engagement, confidence, persistence and success in youth. The literature also suggests that there are several factors that influence the formation of self-concept including family environment, school experiences and peer relationships and social interactions. While there are a number of researches on self-concept and academic achievement there is a very little research done to establish differences based on gender, locality and type of school management among HSC students. Thus, the present study aims to fill this gap by studying the relationship between self-concept and academic achievement and the differences, if any between the various categories of HSC students.

Methodology

Method of Research

The researcher has selected descriptive survey research design to study the relationship between self-concept and academic achievement of HSC students. The descriptive survey method was deemed appropriate as it assists in the examination of the current conditions, behaviours, attitudes, and associations amongst the variables without controlling the research environment. It was by this means that the researcher was able to collect relevant information on self-concept and academic achievement of students systematically.

Sample of the Study

The present investigation was carried out with HSC students in different educational institutions of Coimbatore District. The population of the study were all the students of government and private HSC schools. To get good and representative data a sample of 300 students was selected. Selected participants were cross sectioned with different demographic and educational backgrounds, thus offering a wide range of views on the variables studied.

Students of both gender were included in the sample, therefore the numbers of gender categories in the study were adequate. Likewise, students from rural and urban areas were also added to the sample to be able to examine differences as a result of locality. This integration of students from various social and educational backgrounds helped the researcher to have a complete understanding of self-concept and academic achievement of HSC students.

The representativeness of the sample was also improved by the selection of participants who came from government and private schools. This sample mix was thought to be necessary to ensure that findings were meaningful and balanced. The study included students with different educational backgrounds and experience as it helped in obtaining results which are more representative of the higher secondary student population of Coimbatore district. The selected sample thus served as suitable foundation for the study of the relation between self-concept and academic achievement and comparison between the various categories of students involved in the study.

Sampling Technique

Multistage probability sampling method was used in the present study for sampling the participants. This sampling method was deemed suitable because it provided systematic sampling of the respondents from a large and diverse population with minimal chances of selection bias. Probability sampling was used which increased the representativeness of the sample and the results gathered from the investigation was more reliable.

In the first phase of sampling, the HSC students were identified and selected from various parts of Coimbatore District. An effort was made to include schools of a diverse educational setting so that the sample would represent the characteristics of the study population. The selection of student samples from the identified schools was done using random sampling in the second stage. The selection of the students was fair and objective, with each student having an equal chance of being selected for the study.

The multistage probability sampling revealed that the investigator was able to have a balanced sample of students from various localities, types of school management and gender. This process helped to ensure that representative data were gathered and the conclusions of the study were valid. The sampling technique was therefore sound as a method to study the relationship between self-concept and academic achievement of the HSC students.

Tool used for the Study

A standardized Self-Concept Scale (SCS) was used to collect data for the present study. The scale was designed to assess the self-concept of HSC students. The SCS consisted of 50 items with five response alternatives. Each response was scored from 5 to 1, with total scores ranging from 48 to 240. Higher scores indicated a higher level of self-concept. The scale was standardized before its administration and was used to assess the self-concept of HSC students.

The instrument was standardized before it was administered for the final time and ensured reliability and validity. Preliminary tests were made and changes made as a result of observations and feedback from the pilot phase. This process served to enhance the clarity, relevance and effectiveness of the scale items. The finalized instrument was found to be reliable and valid for measuring the self-concept of HSC students.

Standardized data collection tool improved data collection accuracy and consistency. It helped the investigators to get reliable answers from participants and helped to interpret the answers. Therefore, the standardized Self-Concept Scale (SCS) proved to be an appropriate instrument for assessing self-concept and examining its relationship with academic achievement among HSC students.

Collection of Data

The data were collected by the researcher who visited the sampled schools personally and sought the consent of the school authorities. The students were well informed of the purpose of the study and instructions provided on how to respond to the tool. The students answered the items on their own and in a sincere manner. Upon completion, the responses were gathered, validated and tabulated to be analysed statistically.

Statistical Techniques Used for the Present Study

The data collected from the HSC students were analysed and interpreted with appropriate statistical techniques. The statistical methods used were based on the purpose and hypothesis of the study. Descriptive and inferential statistics were employed in the analysis of the data to guarantee that the findings were systematically analyzed and conclusions were drawn about self-concept and academic achievement.

Descriptive Analysis:

Descriptive statistical measures like mean and standard deviation were used to summarize and describe the characteristic of the data. These measures contributed in understanding the overall level, distribution and variability of self-concept and academic achievement scores of HSC students. The mean gave information on the average performance of the students and the standard deviation gave information on how far the scores were from the average value. These descriptive measures provided a good picture of the overall trend of the responses given by the participants.

Differential Analysis:

Using inferential statistical techniques differences between different groups of students in the study were explored. Independent samples t test was employed to find out that whether there was statistical significant difference between male and female students, rural and urban students, government and private higher secondary students in terms of self-concept and academic achievement or not. The t-test was carried out to compare the means of each group and for testing the formulated hypothesis.

Correlation Analysis:

Besides group comparisons, Pearson product-moment correlation technique was used and the correlation between self-concept and academic achievement was studied. Using this statistical method, the direction and strength of association between the two variables was determined. A correlation analysis was used to determine if there was a relationship between students with high and low self-concept and their academic achievement. This technique was used to get the results which had a great impact on achieving the main objective of the study.

The use of these statistical procedures helped to give meaning to the data gathered and enabled conclusions to be drawn on the relationship between self-concept and academic achievement among HSC students on a scientific basis.

Results and Discussion

The data gathered were analysed statistically in order to get the outcomes that would serve the study purpose.

Hypothesis 1:

Male and female HSC students do not differ significantly in their self-concept scores.

Table 1: Showing the t-test for Self-Concept in relation to Gender

S. No.	Gender	N	Mean	S.D.	t-value	Level of Significance
1.	Male	185	179.64	19.53	0.81	Not significant
2.	Female	115	182.77	20.11		

The statistical analysis showed that the mean of self-concept score obtained by males and females students were 179.64 (SD = 19.53) and 182.77 (SD = 20.11), respectively. Although female group showed a slightly higher mean score, the difference between the two groups was small. A t-test was used to determine the statistical significance of this difference. The calculated t value was 0.81 (Table 1) and this less than the critical value for significance at 0.05 level. Thus, there is no significant difference between the self-concept scores. The obtained t-value indicates that the observed difference in mean scores was not sufficient to establish a statistically significant gender difference in self-concept among the HSC students included in the study.

The results showed that HSC students have similar level of self-concept irrespective of gender. The difference in the mean scores of male and female students was very small, indicating that gender did not influence the self-concept scores of the respondents in the present study. Similar findings have been reported by Wang & Yu (2023), who observed that gender differences in academic self-concept are generally small and influenced by educational contexts rather than gender itself.

The findings indicate that factors other than gender may have contributed to the self-concept scores observed among the students. Educational experiences, learning environment and motivational processes may play a greater role in shaping students' self-concept than demographic characteristics alone (Basarkod & Marsh, 2023; Urhahne & Wijnia, 2023).

The current finding is consistent with Bong & Clark (2019) which highlighted that self-concept is not only related to the demographic characteristics of a person but also to educational and psychological experiences. The present finding also supports the view of Basarkod & Marsh (2023) that academic self-concept is a central motivational construct influenced by students' educational experiences. The fact that there was no statistically significant difference therefore indicates that there is no gender factor that determines the development of self-concept of the students involved in this study. Thus, the null hypothesis which assumed that there is no significant difference between the self-concept of male and female HSC students was accepted.

Hypothesis 2:

Male and female HSC students do not differ significantly in their academic achievement scores.

Table 2: Showing the t-test for achievement based on Gender.

S. No.	Gender	N	Mean	Standard deviation	t-value	Level of Significance
1.	Male	185	277.91	77.49	0.43	Not significant
2.	Female	115	281.02	79.57		

Academic achievement scores analysis showed that male students achieved a mean score of 277.91 (SD 77.49) while females had a mean score of 281.02 (SD 79.57). The average achievement score for female students was higher than that for male students; however, the gap between female and male students was small. An independent samples t-test was used to ascertain if this variation was statistically significant. The calculated t value was 0.43 (Table 2) which was below the critical value of 1.96 at 0.05 level of significance. Hence, the difference in the mean academic achievement scores of the males and females students was not significant. The obtained t-value indicates that the observed difference in academic achievement between male and female HSC students was not statistically significant.

The results show that there is no significant difference in the academic achievement scores of male and female HSC students. The small difference in the mean scores suggests that gender did not have a measurable influence on academic achievement in the present study. Similar findings have been reported by Wang & Yu (2023), who observed that gender-related differences in academic outcomes are generally influenced by contextual and educational factors rather than gender itself.

The findings suggest that academic achievement may be influenced more by factors such as learning strategies, study habits, motivation, parental support, and the learning environment than by gender alone. Contemporary educational research also emphasizes that motivation and learning experiences play an important role in students' academic performance (Urhahne & Wijnia, 2023).

The current result agrees with Adebayo (2020) who found that psychological and environmental variables have greater contribution on academic achievement than demographic variables. Best & Khan (1997) procedures were followed in interpreting the statistical results. The present finding is also consistent with Basarkod & Marsh (2023), who emphasized that students' educational experiences and motivational characteristics contribute more substantially to academic outcomes than demographic characteristics alone. The absence of a significant gender difference indicates that both male and female students demonstrated comparable levels of academic achievement in the present study. The t-value

obtained was not significant and hence the null hypothesis that there is no significant difference between academic achievement of HSC male and female students was accepted.

Hypothesis 3:

Rural and urban HSC students do not show significant differences in self-concept.

Table 3: Showing the t-test for self-concept based on locality.

S. No.	Locality	N	Mean	Standard deviation	t-value	Level of Significance
1.	Rural	191	181.11	19.31	1.00	Not significant
2.	Urban	109	180.80	20.56		

The comparison of the self-concept scores of students from rural and urban backgrounds showed only a slight difference between the two. Rural students had a mean self-concept score of 181.11 (SD=19.31) while urban students had a mean score of 180.80 (SD=20.56). A t-test was used to determine if this difference is statistically significant. The t-value obtained was 1.00 (Table 3) which was less than the critical t-value of 1.96 set at 0.05 level of significance. Thus, it can be concluded that there were no statistically significant differences between the self-concept scores of rural and urban students. The very small difference in the mean scores indicates that locality did not have a statistically measurable influence on the self-concept of HSC students in the present study.

The difference between the two groups was only 0.31, indicating that rural and urban students had nearly similar levels of self-concept. This finding suggests that locality was not a determining factor influencing the self-concept of the respondents. Similar observations have been reported by Basarkod & Marsh (2023), who emphasized that academic self-concept is shaped by educational experiences and motivational processes rather than background characteristics alone.

The findings indicate that similar educational opportunities and learning experiences available to students across different localities may have contributed to comparable self-concept scores. Contemporary educational research also highlights that learning experiences and motivational environments contribute substantially to the development of students' self-concept (Urhahne & Wijnia, 2023).

This finding is supported by Santrock (2024), who stated that the development of self-concept is a process that takes place continuously and constantly from family, peers, teachers, and the educational environment. The present finding is also consistent with Weva et al. (2024), who reported that educational and contextual experiences have a greater influence on students' self-concept than geographical background alone. These influences are experienced by students irrespective of their place of residence. Overall, the findings suggest that personal experiences and educational environment may contribute more to students' self-concept than locality alone.

The present finding also suggests that the developmental experiences and educational opportunities of students in rural and urban areas are becoming more alike. Therefore, geographical location might no longer be a significant contributor to differences in self-concept of upper secondary students. The t value obtained was not up to the level needed for the statistical significance, so the null hypothesis that there is no significant difference between the self concept of rural and urban HSC students was accepted.

Hypothesis 4:

Government and private HSC students do not show significant differences in self-concept.

Table 4: Showing the t-test for self-concept based on type of management

S. No	Type of Management	N	Mean	Standard deviation	t-value	Level of Significance
1.	Government	228	180.48	19.22	0.77	Not significant
2.	Private	72	181.95	20.94		

Self-concept scores were analysed on the types of school management and the results showed that there was only a slight difference between the self-concept of the student in government schools and in private schools at the higher secondary level. The mean self-concept score of the government school students was 180.48 (SD = 19.22) and that of the private school students was 181.95 (SD = 20.94). The average score of private school students was slightly higher, but the gap between the two groups was not very large. An independent samples t-test was used to establish if this variation was statistically significant. The calculated t-value was 0.77 (Table 4) below the t-value of 1.96 at 0.05 level of significance. Therefore, no significant difference was seen between the two. The small difference in the mean scores indicates that the type of school management did not have a statistically significant influence on the self-concept of HSC students in the present study.

Results indicate that the self-concept of the students in government and private schools is at a similar level. The difference in the mean scores was minimal, suggesting that school management was not a determining factor influencing students' self-concept. Similar findings were reported by Basarkod & Marsh (2023), who emphasized that academic self-concept is primarily shaped by educational experiences and motivational processes rather than institutional characteristics. The findings suggest that students' self-concept may be influenced more by their educational experiences, teacher support, family environment and motivational factors than by the type of school management (Urhahne & Wijnia, 2023).

The present finding is consistent with Fradesen (1967), who emphasized that self-concept develops through continuous social and educational experiences. The present finding is also supported by Santrock (2024), who explained that self-concept develops through continuous interactions with family, peers, teachers and the learning environment, irrespective of the institutional setting. The observed similarity in mean scores further supports the conclusion that there was no statistically significant difference between students from government and private school.

The absence of a significant difference indicates that comparable levels of self-concept can be developed among students irrespective of the type of school management. However, the t-value obtained was not significant which indicated that there is no significant difference between the self-concept of the government and the private HSC students, thus the null hypothesis was accepted.

Hypothesis 5:

Correlation Analysis of Self-Concept and Achievement

Self-concept is not significantly related to the academic achievement of HSC students.

Table 5: Co-efficient of correlation between achievement score and their self-concept scores of students.

Sample	Df	'r' value	Level of Significance at 0.05 Level
Entire	298	0.098	Significant

The correlation analysis of self concept and academic achievement showed an r -value of 0.098 (Table 5) which was significant at 0.05 level. The positive correlation indicates a weak relationship between self-concept and students' academic achievement. The value of the correlation is low, but it shows there is significant association between the two variables. Although the relationship was statistically significant, the correlation coefficient indicates that the strength of the association between self-concept and academic achievement was weak. This suggests that self-concept contributed only to a limited extent to students' academic achievement in the present study.

This finding validates the views of Pajares & Schunk (2001) who commented that self belief is an additional factor to success in learning. Similarly, Ogunleye & Musa (2021) concluded that self-concept and self-efficacy are noteworthy factors that predict academic performance. Equally, Pekrun & Marsh (2022) described that self-concept and achievement have a reciprocal relationship wherein enhancement in one aspect has a positive impact on the other. The present finding is further supported by Hübner et al. (2023), who reported that although reciprocal relationships between self-concept and achievement exist, their magnitude may vary across educational contexts and should be interpreted using empirical evidence. Likewise, Basarkod & Marsh (2023) identified academic self-concept as a central motivational construct that contributes to students' learning outcomes, while Weva et al. (2024) concluded that self-concept is positively associated with academic achievement across different educational settings.

The correlation was weak but statistically significant, indicating that self-concept is one of several factors associated with academic achievement rather than the sole determinant of students' academic performance. The findings therefore support the importance of strengthening students' self-concept alongside other academic and motivational factors to enhance educational outcomes.

Findings of the study

The results obtained in the present investigation showed that the overall achievement of HSC students in academic performance were of moderate level and their self-concept was of high level. The findings also showed that there was no significant difference between learners in both gender in terms of academic achievement as it was not considered as a significant determinant of academic achievement among the study sample. Likewise, no significant differences were found in the self-concept scores of the males and females, demonstrating that there were no differences in how the males and females perceived themselves in terms of their skills and characteristics.

The results of the test according to locality indicated that students with rural and urban backgrounds had almost the same score in self-concept. This result indicates that self-perceptions of the participants did not greatly differ based on the whereabouts. Similarly no significant difference was found between the self-concept of government and private higher secondary students. The findings suggest that the management of the school does not have a significant impact on pupils' confidence and self-beliefs.

The study found a statistically significant but very weak positive relationship between self-concept and academic achievement. The finding implies the need for psychological aspects in the success of the learning process and further suggests that positive self-concept can help improve academic achievement for higher secondary students.

Interpretation of findings

The results of the current study reveal that overall the HSC students have a positive self-concept and moderate level of achievement. It was found that the pupils' self-concept was high – students have positive perceptions about themselves, their abilities and competencies. These positive self-perceptions are important because they will contribute to

building confidence, motivation and involve students in learning opportunities. Overall, there was no significant difference between the self-concept and academic achievement of males and females; this means that opportunities and educational conditions for the development of male and female students are alike. This is in accordance with the equality and balance of the education resource in the current education system.

Likewise, the difference between rural and the urban students was not significant, suggesting that locality might no longer play a significant role in developing self-concept. Enhanced availability and access to education, communication technology and opportunities for learning may have helped to minimize traditional differences between rural and urban areas. The findings in this study also show that there was no significant difference between the self-concept of government and private school students, suggesting that positive self-beliefs are not solely dependent on the management of the school, but also on the individual experiences that the student has, the supports that teachers, peers and family provide. Pupils from both school systems seem to have an equal sense of confidence and self-perception. It is important to note that self-concept is positively and significantly related to academic achievement, which points to the importance of psychology in the success of education. The result indicates a statistically significant but very weak relationship between self-concept and academic achievement. This means that besides the academic knowledge delivered by the educational institutions, there is a need for programmes that increase the self-confidence and motivation of the students, and their emotional health.

Educational Implications of the Present study

The statistically significant but very weak positive relationship observed between self-concept and academic performance implies that teaching programs must be changed to more of an integrated approach that emphasizes the mental health of the student. Since students of all different demographics (by gender, school type, and location) continue to have a high self-concept but only achieve average academic achievement, there is an opportunity to be employed by educators to use this established self-belief as a stepping stone to greater achievement. They need to adopt programs that would see to it that the average performance is challenged to high by matching the students achievement strategies with their positive self perceptions and ensuring that there is fair expectations in rural, urban, privates, and government schools. In the end, since self-concept serves as a pillar of success, social-emotional learning should be an integral part of curriculum in schools to keep these levels of confidence going, so that the internal gauge of the student can continue being a catalyst of academic achievement.

Future Directions

In the current study, only HSC students in Coimbatore District were studied. Larger samples of the various districts and states can be used in future research to come up with broader and generalizable results. Equal studies can also be conducted with regards to college students and students who belong to other educational levels. One can incorporate more psychological factors like self-esteem, emotional intelligence, stress, motivations, study habits, and anxiety to self-concept as well as to determine how they affect academic achievement in a more holistic approach. Further studies can also be conducted by researchers in the future to determine how family background, peer influence, teacher support, and school climate affect the development of self-concept in students. The current research took the descriptive survey approach. Future research can utilize experimental, longitudinal, or qualitative research methods to get a clearer insight into the issue of self-concept and academic performance. Further research can also be carried out to develop and test guidance and counselling programmes that can enhance self-concept and educational performance of students.

Conclusion

Based on the results of the present study, it can be concluded that self-concept is one of the factors that can impact on high school students' performance in school. The study found a statistically significant but very weak positive relationship between self-concept and academic achievement. Gender, locality and type of school management didn't show any significant difference in self-concept and achievement but the relationship between self-concept and academic achievement was positive and significant. The research points out that academic achievement are not only determined by the intellectual ability, but also by the psychological and emotional factors. Students with confidence, positive self beliefs and healthy self perceptions will tend to perform better in education. Hence, schools ought to offer conducive learning conditions that reinforce the self-confidence of students, emotional and academic drive. The research results highlight why teachers, parents and schools should consider the psychological growth of students as a whole beyond the academic teaching and learning. Enhancing of self concept among students may serve as a positive factor towards academic achievement, character growth and further education.

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