# Relationship Between Self-Concept and Academic Achievement of Adolecents Students on The Basis of Gender Differences.

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| ARTICLE INFO | ABSTRACT |
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| | Self-concept plays a crucial role in shaping a child's personality. Educators must take into account various factors that can foster a more positive self-concept. These factors include parenting styles, experiences of repeated failure, depression, and internal self-criticism. Within the school environment, the development of a student's self-concept is influenced by educators' emphasis on educational psychology in their teaching practices. A positive self-concept fosters a conducive learning atmosphere, which is believed to enhance students' academic performance. This study investigated the relationship between self-concept and academic achievement among adolescent students. It also explored gender differences in both self-concept and academic performance. The research involved 500 adolescent students from senior secondary schools in Dehradun city, and the data was analyzed using an independent sample t-test. The findings indicated that there was no significant difference in the levels of self-concept and academic achievement between male and female adolescents and their medium of instruction.<br><br>**Keywords:** self-concept, academic achievement, gender, learning |

## INTRODUCTION

**The self-concept** is a general term used to refer as to how one See's himself, how worthy are they, how they feel about themselves and how much of self-love do they practice. Self-Concept is the evaluation or perception of themselves. To be aware of oneself is to have a concept of oneself.
Self-concept is our personal knowledge of who we are, encompassing all of our thoughts and feelings about ourselves physically, personally, and socially. Self-concept also includes our knowledge of how we behave, our capabilities, and our individual characteristics. Our self-concept develops most rapidly during early childhood and adolescence, but self-concept continues to form and change over time as we learn more about ourselves.

**Adolescence** is a period in development between the onset of puberty and adulthood. It usually begins between 11 and 13 years of age with the appearance of secondary sex characteristics and spans the teenage years, terminating at 18 to 20 years of age with the completion of the development of the adult form. During this period, the individual undergoes extensive physical, psychological, emotional, and personality changes. As adolescence is a period characterized by emotional upheaval **(Gilman and Huebner 2003)** as well as both exposure to more opportunities and risk **(Chow, 2005)**. storm and stress in relation to adolescents can be said to be the challenges faced and dealt with during this process of growth, these stress and storm can be related to the pressure and expectation from society, media and peers' pressure, stress is not necessary caused by this process of growth but by the demand and responsibility that is usually attached to it. Adolescents are at risk of developing psychological ill being; furthermore, they face a great number of challenges and stressor that are related to school. For this reason, research on adolescents has been based in the context of education in both regular and in special education **(Corcker, 2000)**
These period of development in adolescents have various impact and effects on what kind of stress they face and how it is being dealt with, this stress can either physical, intellectual, emotional or social. This reflects a significant shift in perspective away from a functionalist view on children and adolescents to the point of seeing

then as more than just learner and promoting their rights and needs **(Bullingr, 2009)**

Adolescent period is often believed to be a difficult period and very critical stage of transition because of various qualitative shift that they pass through at that moment of life and this conflicts with breaking away from the old self and interest of the childhood memories and all these periods are accompanied by significant changes of various degrees for instance, all the characteristics involved in puberty such as menstrual cycle in girls and hair growth in certain part of the body in boys as well as deepening of the voice. Some people are predisposed towards feeling of frustration, indeed in terms of temperament (frustration), in adolescence and neuroticism in adulthood. Temperamental frustration is associated with perceptual alternates including changes in perceived relationship affection.

Academic Achievement: -Over the years behavioral scientists have noticed that some people have an intense desire to achieve something while others may not seem that concerned about their achievements. This phenomenon has attracted a lot of discussions and debates. Scientists have observed that people with a high level of achievement motivation exhibit certain characteristics Academic Achievement may be defined as achievement in all academic disciplines in class as well as co-curricular activities, it includes achievement in sporting behaviors, confidence, communication skills, punctuality, arts, cultural activities and the like which can be achieved only when an individual is well adjusted.

**Trow** defined academic achievement as "Knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupil's performance".

**Good** refers to academic achievement as "the knowledge obtained or skill developed in the school subjects usually designed by test scores or marks assigned by the teacher".

"Academic achievement includes both curricular and co-curricular performance of the students. It indicates the learning outcome of the students. In classrooms students performs their potentials efficiently, as a result of it, learning takes place". The learning outcome changes the behavior patterns of the student through different subject.

## REVIEW OF RELATED LITERATURE

**Shavelson et al. (1976)** identify key features in their conceptualization of self-concept. First, self-concept is organized and multifaceted, such that each facet represents an experience that is considered to be meaningful. It can be divided into categories related to academics (academic self-concept) and those that are not (nonacademic self-concept). Academic self-concept is further divided into self-concepts related to specific academic subjects, while nonacademic self-concept is comprised of social, emotional, and physical self-concepts. Second, this multifaceted structure of self-concept is hierarchically organized with general self-concept at the apex and domain-specific experiences at the base, thus suggesting that general (i.e., global) self-concept influences domain specific self-concepts. Third, whereas the general self-concept is thought to be stable, self-concept becomes less stable as one descends the self-concept hierarchy toward specific facets or domains (e.g., academic self-concepts). Accordingly, changes in self-concept in a specific facet may not necessarily lead to changes in general self-concept. Fourth, self-concept is developmental in that as we get older, the construct becomes increasingly multifaceted, and positive outcomes in a domain are expected particularly when one experiences a positive self-concept within that corresponding domain. For example, a high self-concept in mathematics is expected to contribute to high academic achievement in mathematics. Fifth, self-concept includes both affective (self-descriptions) and cognitive (self-evaluations) evaluations of the self that are considered to be favorable or unfavorable by an individual. Sixth, self-concept differs from the concepts with which it is related. For example, in terms of academic self-concept, perceptions of ability in one subject (e.g., mathematics) are thought to be more closely related to achievement outcomes in that same subject than outcomes in another academic subject (e.g., English).

Self-concept is also defined as an individual's perception of themselves, including their physical, emotional, and intellectual characteristics, as well as their life experiences and values **(Lau, 2017)**.

Self-concept refers to the person's judgment of his or her own competence or skills in relation to others **(Scott 2002).** Self-concept is an important part of identity development during this period and can have a significant impact on learning. Self-concept is generally defined as "the thoughts, feelings and beliefs a person has about themselves" **(Harter, 1999) Combs and associates (1971)** cited that the most significant and single influencing factor of behavior is the self-concept. Situations might change from time to time or location to location but the central beliefs that individual have about themselves are remains present in shaping their behavior. **Seiler and Beall (2011)** plotted that self-identity or self-concept is a perceived self of a person that contains of a comprehensive and organized beliefs and attitudes about own-self. The self is presented as a fundamental matter from the very beginning in personality theories in the field of psychology. The self-concept is said to be a set of organized self-attitudes that are comparatively established and characteristic of an individual **(Demo, 1992).**

**Academic achievement** refers to particular learning in a particular setting which is defined by examination marks teacher given grades, percentiles in academic subjects. School success depends upon the ability of the students to qualify such examinations. **Academic achievement** refers to the degree of success or level of attainment by pupil in the scholastic or the curricular subjects prescribed within the syllabus in brief academic achievement is the amount of knowledge derived from learning in the classroom.

## OBJECTIVES
- To study the relationship between self-concept and academic achievement on the basis of gender differences.
- To study the relationship between self-concept and academic achievement on the basis of medium of instruction.

## HYPOTHESIS
- There is no significant difference between the self-concept and academic achievement of adolescents on the basis of gender difference.
- There is no significant difference between the self-concept and academic achievement in relation to medium of instruction.

## POPULATION OF THE STUDY
Population is defined as the number of individuals in any field enquiry under consideration. The population for the study includes all the schools of the Dehradun District which covers the aided and private school of Dehradun district and from this only senior secondary school students were taken into consideration.

## SELECTION OF THE SAMPLE
The paper includes a sample of male students 247 and female students 253 who were selected from the senior secondary schools of district Dehradun by a simple random sampling technique. The Dehradun district consist total number of above 200 senior secondary schools. A sample of 500 was drawn out these schools from through random sampling technique.

## REASEARCH TOOLS
There are two types of research tools:
1) Standardized research tools.  2)Non-standardized research tools.

## ADMINISTRATION OF TOOLS AND DATA COLLECTION
The present study will make use of the standardized tool as mentioned below: -
**Self-Concept Rating Scale (SCRS) Dr. Pratibha Deo.** It is the revised from of old personality word list. It contains 90 adjectives which reveal the self-concept in the areas of intelligence, emotional, social, character and aesthetic.
The present study will make use of the **non-standardized research tools** as below- The marks obtained in 12th standard were taken as indicator of academic achievement of the student. Personal Intervention Schedule to collect the Personal & Social information of the respondents to be conducted by the researcher herself.

## STATISTICAL TECHNIQUES USED
The following statistical tools were used for the data analysis.
1. Mean. 2. Standard Deviation. 3. Independent T-Test.

## ANALYSIS OF THE DATA
$H_0 1$: There is no significant difference between the self-concept and academic achievement of adolescents on the basis of  gender difference.
Ha1: There is a significant difference between the self-concept and academic achievement of adolescents on the basis of gender  difference.

### 1.1 Showing the Group Statistics of self-concept and academic achievement of adolescents

|  | Gender | N | Mean | Std. Deviation | Std.        Error Mean |
|---|---|---|---|---|---|
| Academic Achievement | MALE | 247 | 74.000 | 8.000 | .510 |
|  | FEMALE | 253 | 76.500 | 7.500 | 0.470 |
| SCOS | MALE | 247 | 41.000 | 2.000 | 0.127 |
|  | FEMALE | 253 | 43.000 | 2.500 | 0.158 |

*Table1.1: Show the group statistics of male and female adolescents on Academic Achievement and SCOS*
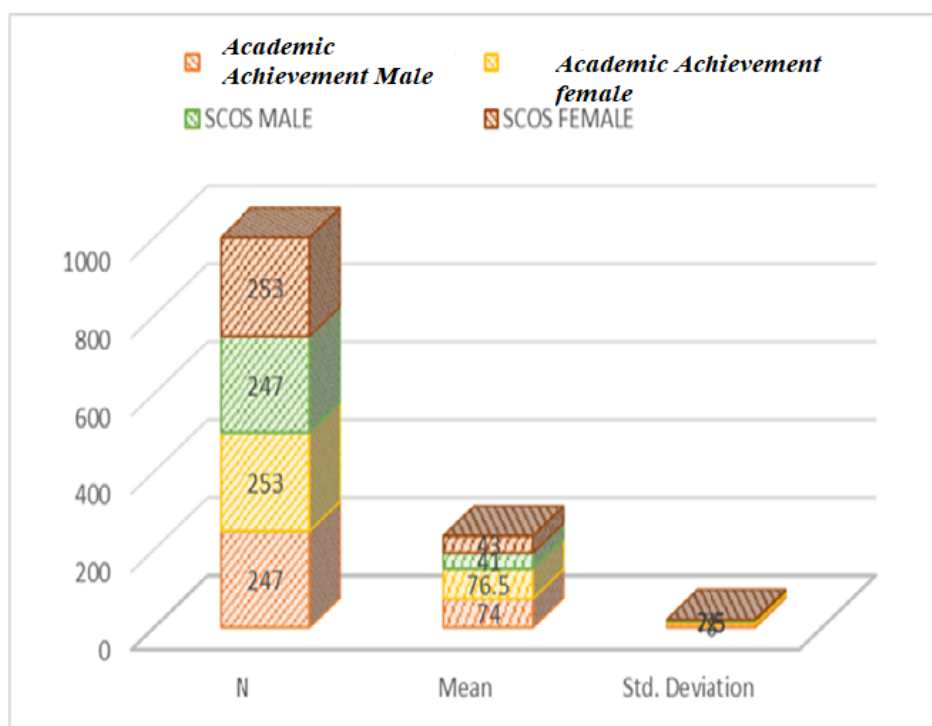
***Fig 1.1: Show the group statistics of male and female adolescents on academic Achievement and SCOS***

**1.2 Showing the Independent Samples Test of self-concept and academic achievement of adolescents**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | T | Df | Sig. (2-tailed) | Mean Difference | St. Error Difference | Lower | Upper |
| Academic Achievement | Equal variances assumed | .500 | .000 | 0.020 | 498 | .003 | 2.500 | 0.556 | -3.591 | -1.409 |
| | Equal variances not assumed | | | | 497.967 | .003 | 2.500 | 0.556 | -3.591 | -1.409 |
| SCOS | Equal variances assumed | 0.800 | .000 | .030 | 498 | .001 | 2.000 | 0.345 | 1.321 | 2.679 |
| | Equal variances not assumed | | | .030 | 480.357 | .001 | 2.000 | 0.345 | 1.321 | 2.679 |

***Table 1.2: Show the independent sample test on academic* achievement *and SCOS of adolescent student***

The upper Table and Figure 1.1 present the group statistics, indicating that the mean score for academic achievement of male and female students **(74.000,76.500)** respectively surpasses SCOS of male and female students **(41.000,43.000)**. The standard deviation for academic achievement of male and female students **(8.000,7.500)** respectively surpasses SCOS of male and female students **(2.000,2.500)**. This data implies that, on average, Female adolescents' students exhibit a greater academic achievement and self-concept than male adolescents' counterparts.

The lower table 1.2 show the **Equality of Variances where** both **academic achievement** and **self-concept** show significant differences based on sex. Mean Difference = 2.500: Females scored significantly higher on average than males in academic achievment.95% Confidence Interval: [-3.591, -1.409]: This range does not include zero, confirming that the difference is significant. Mean Difference = 2.000: Females scored significantly higher on self-concept than males. 95% Confidence Interval: [1.321, 2.679]: The confidence interval does not include zero, which confirms the statistical significance of the difference. Female adolescents scored higher than male adolescents in both academic achievement and self-concept.

Thus, **the null hypothesis (Ho)** "*There is no significant difference between the self-concept and academic achievement of adolescents on the basis of gender difference*" is rejected for both academic achievement and self-concept, confirming that there is a significant difference between males and females in both measures.

$H_o2$ : There is no significant difference between the self-concept and academic achievement in relation to medium of instruction.
$H_a2$: There is a significant difference between the self-concept and academic achievement in relation to medium of instruction.

## 2.1 Showing the Group Statistics on medium of instruction of self-concept and academic achievement of adolescents

| | Medium of instruction | N | Mean | Std. Deviation | Std.        Error Mean |
|---|---|---|---|---|---|
| Academic Achievement | English | 250 | 78.000 | 7.500 | 0.474 |
| | Hindi | 250 | 73.000 | 7.000 | 0.442 |
| SCOS | English | 250 | 44.500 | 2.500 | 0.158 |
| | Hindi | 250 | 42.000 | 2.000 | 0.127 |

*Table 2.1: Show the group statistics on medium of instruction of adolescent students on academic achievement and SCOS*
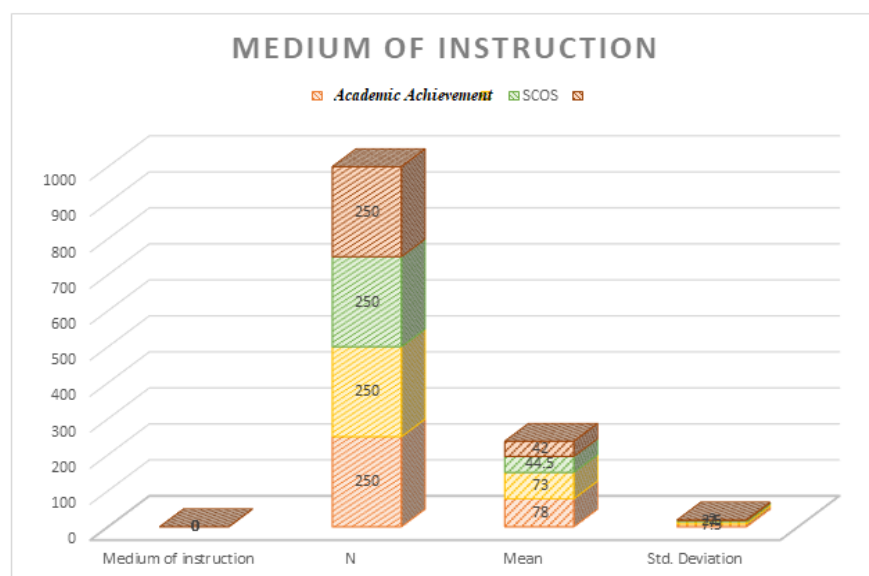


*Fig 1.1: Show the group statistics on medium of instruction of adolescent's students on academic achievement and SCOS*

**Table 2.2: Showing the Independent Samples Test of self-concept and academic achievement of adolescents**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | t | Df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Academic Achievement | Equal variances assumed | .800 | .000 | .370 | 498 | .000 | 4.500 | 0.692 | 3.142 | 5.858 |
| | Equal variances not assumed | | | .370 | 497.367 | .000 | 4.500 | 0.692 | 3.142 | 5.858 |
| SCOS | Equal variances assumed | 1.200 | .000 | .275 | 498 | .000 | 2.500 | 0.500 | 1.518 | 3.483 |
| | Equal variances not assumed | | | .275 | 496.618 | .000 | 2.500 | 0.500 | 1.518 | 3.483 |

*Table 2.2: Show the independent sample test on academic achievement and SCOS of adolescent student based on medium of instruction*

The upper Table and Figure 2.1 present the group statistics, indicating that the mean score for academic achievement of English and Hindi medium students **(78.000,73.000)** respectively surpasses SCOS of English and Hindi medium students **(44.500,42.000)**. The standard deviation for academic achievement of English and Hindi medium students **(7.500,7.000)** respectively surpasses SCOS of English and Hindi medium students **(2.500,2.000)**. This data implies that, on average, English medium students exhibit a greater academic achievement and self-concept than Hindi medium students' counterparts.

The lower table 2.2 show the **Equality of Variances where** both **academic achievement** and **self-concept** show significant differences based on Medium of instruction. Mean Difference = 4.500: English medium scored significantly higher on average than Hindi medium in academic achievement. 95% Confidence Interval: [3.142, 5.858]: This range does not include zero, confirming that the difference is significant. Mean Difference = 0.500: English medium students scored significantly higher on self-concept than Hindi medium students. 95% Confidence Interval: [1.518, 3.483]: The confidence interval does not include zero, which confirms the statistical significance of the difference. Overall English Medium adolescents' students scored higher than Hindi medium adolescents Students in both academic achievement and self-concept. The **p-value** (0.000) is less than α=0.05\alpha = 0.05α=0.05, indicating that the result is statistically significant.

Thus, **the null hypothesis (Ho)** "*There is no significant difference between the self-concept and academic achievement of adolescents on the basis of medium of instruction*" is rejected for both academic achievement and self-concept, confirming that there are significant differences in both self-concept and academic achievement based on the medium of instruction

## Conclusion and Suggestions

- Based on these findings, a notable correlation between self-concept and academic performance among secondary school students has been established. In terms of **academic achievement, the significant difference is indicated by a mean difference of 2.500, accompanied by a p-value of 0.003. Regarding self-concept (SCOS), the significant difference is represented by a mean difference of 2.000, with a p-value of 0.001. However, when examining this relationship separately for male and female students, it was observed that female students did not exhibit this correlation, whereas male students adhered closely to the overall results.**

- **For both self-concept (SCOS) and academic achievement, the null hypothesis (HoH_oHo) is rejected. This indicates that there are significant differences in both self-concept and academic achievement based on the medium of instruction, with English-medium students outperforming Hindi-medium students in both measures.**

- In light of these findings, the following recommendations are proposed. Planning, which is crucial in various sectors today, also significantly influences the efforts of educational planners and policymakers. When developing the framework for curricular and co-curricular activities, it is essential to consider the inclusion

of opportunities and experiences that can enhance children's self-concept. The curriculum serves as the foundation for all educational endeavors. It encompasses all activities, both within and outside the school, that children engage in, essentially acting as the pathway they are expected to navigate. Consequently, curriculum developers should integrate activities and experiences that promote the self-concept of students. Textbooks play a pivotal role in fostering students' self-esteem, and it is the responsibility of textbook authors to contribute positively to this aspect. Authors should select topics and lessons that uplift students' self-concept. Additionally, teachers must structure classroom activities to ensure that all students have equal opportunities to participate. Practices that encourage the enhancement of students' self-concept should be actively promoted. Teachers should prioritize interest-driven activities to improve student learning. Furthermore, parents should create a supportive environment that allows their children to express their thoughts and feelings freely, fostering a sense of fearlessness that reflects in their personalities as a strong self-concept, ultimately leading to the development of a well-rounded individual.

- It is concept of self which personifies the child as a whole. The Self-concept is the child's way of looking at himself. It also signifies his way of thinking, feeling and behaving. We hold that a person's feeling and cognitive process of which he has awareness are the major components of self-concept. Research has supported the belief that there is a persistent and significant relationship between self-concept and academic achievement, and the change in one seems to be associated with a change in other (Marsh 1992; Marsh and Craven, 1987). Many self-concepts researches have reported positive self-concept to have causal predominance over academic achievement (Shavelson & Bolus, 1982, Marsh, 1987). Marsh (1992) showed that the relationship of self-concept to school achievement is very specific. Better self-concept is associated with better scholastic achievement test (Raju 2013) and has a significant relationship between self-concept and academic achievement (Sikhwara 2014; Archana & Chamudeswari 2013).

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