

# The Relationship between Self-esteem and Students' Academic Achievement among Entoto Amba Secondary School Students

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## Abstract

The purpose of this study was to investigate the relationship between self-esteem of students and their academic achievement among Entoto Amba secondary school students. To carry out the study, 150 students were selected from ten sections and two grade levels of Entoto Amba Secondary School through stratified random sampling technique. A descriptive survey research design was employed for this study. The data was analyzed through both descriptive and inferential statistics. The correlation results indicated statistically significant positive relationship between self-esteem and students' academic achievement. There was also statistically significant positive relationship between educational status and self-esteem. No statistically significance sex difference was observed from the independent T-test results on students' self-esteem. Similarly, there was no statistically significant difference of grade level of students and their self-esteem. On the basis of the results of this study, it was suggested that all stake holders should actively involve for enhancing individuals self-esteem to improve students' academic achievement. Besides, other researchers are recommended to conduct further research on the issue with wider scope of study.

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## 1. Introduction

### 1.1. Background of the Study

Self-esteem can be literally defined as how much value people assign on themselves. It is the evaluative component or aspect of self-knowledge. High self-esteem implies a highly favorable global evaluation of the self. Low self-esteem also denotes to an unfavorable description of the self. Self-esteem does not convey any definitional necessity of accuracy whatsoever. Thus, high self-esteem may infer to an accurate, justified, balanced appreciation of one's worth as a person and one's successes and competencies, but it can also refer to an exaggerated, egotistical, magnificent, unwarranted sense of self-important superiority over others. Similarly, low self-esteem can be either an accurate, well-founded understanding of one's shortcomings as a person or a distorted, even pathological sense of insecurity and inferiority. Various research findings have shown a strong relationship between levels of self-esteem and academic achievement (Auer, 1992; Benham, 1993; Klein & Keller, 1990; Joseph, 1992; Rennie, 1991; Solley & Stagner, 1956 cited in V. Shindler 2011). While this relationship may be well documented, it has not been shown to have widely or systematically informed practice.

Different responsible bodies such as teachers, parents, therapists, and others have focused efforts on boosting self-esteem, on the assumption that high self-esteem will cause many positive outcomes and benefits. Contemplation on the effects of self-esteem is complicated by several factors. Because many people with high self-esteem intend to exaggerate their successes and good traits, objective measures of the outcomes have been emphasized. High self-esteem is also a heterogeneous category, encompassing people who frankly accept their good qualities along with narcissistic, defensive, and conceited individuals (Baumeister, Campbell, Krueger, and Kathleen, Vohs, 2003).

The modest associations between self-esteem and school academic achievement do not indicate that high self-esteem leads to better performance. Rather, high self-esteem is partly the enhanced from better school academic performance. Exertions of enhancement the self-esteem of students have not been revealed to increase academic performance and may sometimes be counterproductive. Work performance in adults is sometimes associated to self-esteem, although the correlations differ widely, and the direction of causality has not been recognized. Occupational accomplishment may enhance self-esteem rather than the reverse. Instead, self-esteem may be useful only in some job circumstances. Laboratory studies have generally unsuccessful to find that self-esteem causes better task performance, with the significant exception that high self-esteem enables persistence after failure ((Baumeister, Campbell, Krueger, and Kathleen, Vohs, 2003).

According to Steinberg and Morris (2001), throughout adolescence periods, global self-esteem remains stable and slightly increases. Daily fluctuations in self-esteem is reported in early adolescence than younger or older individuals, but self-esteem becomes stable with age.

Research also indicates that some adolescents show high levels of stability in self-esteem, whereas others do not and that self-esteem varies according to ethnicity and gender. For example, recent meta-analyses have indicated that Black adolescents have higher self-esteem than whites and those males have slightly higher self-

esteem than females. Across all groups, however, high self-esteem is related to parental approval, peer support, adjustment, and success in school (Luster & McAdoo 1995; Deihl et al 1997; DuBois et al 1998; Kling et al 1999; Gray-Little & Hafdahl 2000, cited in Steinberg and Morris, 2001).

According to (Tadesse, 2009) students' academic achievement can be affected by students' characteristics such as the well-being of the student in the school, participation in scholastic and co-curricular activities, and perception of students in school rules and regulation, and perception about familial involvement and support could affect the achievement of female students.

The majority of female students may feel intimidated by pushy people, or have low self-esteem and regularly put aside their own desires in favor of what others want. This can result in a variety of psychological problems, especially depression, with feelings of low self-esteem and helplessness. Lack of assertiveness makes them feel powerless and make them be dependent on others (mostly male students of their department) and low performance in their academic achievement (Wudu & Getahun, 2009).

Therefore this study was devoted on the relationship between self-esteem and academic achievement of students in Entoto Amba secondary school students, Addis Ababa, Ethiopia.

## **1.2. Statement of the problem**

High school is considered as a critical time in a person's life. It's the time when individuals are trying to find themselves and build a strong personality with respect to the relationships they create with their peers, teachers, and parents. This is a time when puberty occurs and everybody's bodies are changing and developing. It's also a time when adolescents start to notice the opposite sex. These changes are new and interesting and begin to distract them from other matters at school. It's also a stressful time academically when grades and test scores have the power to make or break their future endeavors. All these factors have the ability to affect adolescents' level of self-esteem (Guglielmi, 2010).

As per Byrne (1984) self-esteem may have motivational properties that may facilitate changes in academic achievement. In addition, Marsh and Yeung (1997) have demonstrated that academic success had significant effects on subsequent academic self-esteem and that academic self-esteem also had substantial effects on subsequent academic achievement. This reciprocal relation between academic self-esteem and achievement has also been supported by other researchers. Self-esteem also had significant effects on high school students' selection of coursework. Measures of self-esteem tend to assume the nature of the other measures within which the self-esteem items are embedded. Thus, self-esteem items became more physical when embedded within a physical context but became more academic when embedded within an academic context (McInerney, Dowson, Yeung and Nelson, 2001).

Much attention has given to the associations between self-esteem and academic attainment. Some researchers investigated the relationship between self-esteem and academic achievement and found that high self-esteem facilitates academic achievement. Only a limited correlation was revealed between self-esteem and academic achievement. A number of latest studies have tried to investigate the direct association between self-esteem and academic achievement (Naderi, Abdullah, Aizan, Sharir and Kumar, 2009).

Pullmann and Allik, (2008), suggested that low general self-esteem does not essentially indicator of low academic attainment. Their finding revealed that low general self-esteem is a significant predictor of higher school performance. However, research findings suggested that previous self-esteem has minor positive effect on subsequent educational attainment. People with high self-esteem may set higher ambitions than people with low self-esteem. They may be more willing to persevere in the face of primary failure and less likely to give way in paralyzing feelings of incompetence and self-doubt. Learning, by definition, involves acquiring information and skills that one does not initially have, and high self-esteem may help prevent the recognition of one's initial incapability from producing a sense that the cause is hopeless. High self-esteem may foster the confidence to tackle difficult problems and enable people to derive satisfaction from progress and success.

Different findings in different parts of Ethiopia showed the relationship between self-esteem and academic achievement of students. However, particularly in the study area much research was not conducted on the issue. That is why this research focuses on students' self-esteem and academic achievement of Entoto Amba Secondary School students.

In general this paper tried to answer the following questions:

1. What is relationship between self-esteem and students' academic achievement?
2. Is there gender difference in self-esteem of students?
3. Is there any difference in self-esteem across educational status?

## **1.3. Objectives of the study**

### **1.3.1. General objectives**

The study aimed at to investigate the association between self-esteem and academic achievement among Entoto Amba secondary school students.

### 1.3.2. Specific objectives

The specific objectives of the research are:

- Analyze the relation between self-esteem and academic achievement.
- Examine the variation in self-esteem across gender differences.
- Find out variation in self-esteem in grade level of students.

### 1.4. Significance of the Study

So far numerous researches were conducted in the area of self-esteem and academic achievement. Thus, the study will attribute the following upon its completion such as:-

- ✓ It may create awareness regarding to the importance of self-esteem on education.
- ✓ It calls for further study by the same researcher or other in depth.

### 1.5. Delimitation of the study

Students' academic achievement can be related with different personal, socio-cultural and environmental elements. However this study focused only on self-esteem of students within one secondary school, Entoto Amba secondary school students and limited sample size because of the constraint of different resources (like time, financial, material resources).

### 1.6. Operational Definition

**Self-esteem:** students' general evaluation of himself or herself as measured by Rosenberg's (1965) scale.

**Academic achievement:** academic result of students who were studying at Entoto Amba secondary school in grade 9<sup>th</sup> and 10<sup>th</sup> in 2012.

**Gender:** socially constructed difference of maleness and femaleness.

**Sex:** biological difference of maleness and femaleness.

**Educational status:** the grade level of students in their teaching and learning process.

## 2. Methodology of The Study

### 2.1. The Study Design and Population

The study employed a descriptive survey research design. The study population was Entoto Amba secondary school students in Addis Ababa, Ethiopia. The study area was selected purposely where the criteria was familiarity and proximity of the study area for the researcher. The target group of the study includes 36 sections of grade 9 and grade 10 students.

### 2.2. Sample Size and Sampling Techniques

In order to determine the sample size, the schools were first stratified into two strata: grade level and sex of students (with grade 9 and 10 as well as male and female). Then, allocation of the study subjects was made proportional to the size of the classes. Therefore Stratified sampling technique was employed to represent the sex and grade level differences through random selection of participants. The sample size of the study was 150 i.e. 75 participants from grade 9 and 75 participants from grade 10 with the consideration of homogeneity of participants and financial resources. Participants were selected from 10 sections (5 sections from grade 9 and 5 sections from grade 10) which represent 15 participants of each section.

### 2.3. Data Collection Tools and Procedures

A pre-tested self-administered questionnaire was used to collect the data. In order to measure students' self-esteem, an adapted standardized measure the Rosenberg Self Esteem Scale (RSES) (Tevakkoli, 1995) cited in Baumeister, Campbell, Krueger, and Kathleen, Vohs, 2003), with 5 Likert of 10 items were utilized. On the other hand, students' average academic semester result was taken from students' record as a measure of academic achievement. Thus, the variables collected include socio-demographic characteristics, self-esteem and academic achievement of students. The questionnaire was first prepared in English and then translated into Amharic. Throughout data collection time the accuracy and completeness of the questionnaire was checked by researcher. Additionally, document analysis was employed to collect the average academic score of participants. Finally, the collected data were coded and entered into an SPSS/PC computer statistical software package

### 2.4. Data Analysis:

The data were analyzed by using SPSS version 20 computer statistical package. In order to analyze the data, both descriptive and inferential statistics were employed. Descriptive statistics such as mean, frequencies and percentages were used to analyze demographic variables of respondents. Whereas inferential statistics such as Pearson correlation and independent sample t-test were utilized to see the relationship variables and differences between study variables respectively.

### 3. Results

#### 3.1. Socio-demographic Characteristics of Respondents

##### 3.1.1. Sex Wise Classification of Respondents

Table: 1. Sex of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	75	50.0	50.0	50.0
female	75	50.0	50.0	100.0
Total	150	100.0	100.0	

As indicated in the above Table 1, an equal number of male and female students were selected as participants of the study, with 75 participants from each sex.

##### 3.1.2. Age Wise Classification of Respondents

Age range of participants in this study was 60(40%) students from 12-14, whereas 90(60%) students responded as they were at the age range of (15-18). The result implies most of the respondents were found at the adolescence stage of developmental level.

##### 3.1.3. Educational Status of Respondents

As depicted in the Table 2 below, participants were equally distributed from grade 9 and 10 i.e. 75 (50%) from grade 9 and 75 (50%) from grade 10.

Table: 2. Educational status of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid grade 9	75	50.0	50.0	50.0
grade 10	75	50.0	50.0	100.0
Total	150	100.0	100.0	

#### 3.2. Interrelationship of study variables

To determine the relationship among the variables, Pearson correlation coefficients was used and independent sample T-test employed to test the variability of variables in the study.

##### 3.2.1. Self-Esteem and Academic Achievement

We conducted a Pearson correlation coefficients test, which showed different correlations among three variables (self-esteem, educational status and academic achievement). The strongest relationship was indicated between self-esteem and academic achievement,  $r=.70$ ,  $p<.001$ . Meanwhile, the weakest relationship was identified between sex and self-esteem with a negative correlation:  $r=-.044$ ,  $p>.05$ . See also figure 1. Besides, educational status and self-esteem of individuals showed positive correlation with  $r=.50$  and  $p<.05$ .

From this result with high positive correlation of  $r=.70$  and  $p<.001$ , we can deduct that individuals' academic achievement increases as their self-esteem increases. Similarly, academic achievement increases with the increment of educational status since the correlation the result is indicated positive correlation of  $r=.50$  and  $p<.05$ . In contrast, the increment of sex of respondents showed very low negative correlation with academic achievement of individuals. The results seem similar with prior research findings which indicate strong relationship between self-esteem and academic achievement of students.

#### Correlations

Table: 5. The relationship between domains

		academic achievement of respondents	Self-esteem of respondents	sex of respondents	educational status of respondents
academic achievement of respondents	Pearson Correlation	1	.702(**)	-.044	.502(**)
	Sig. (2-tailed)		.000	.819	.005
	N	150	150	150	150
Self-esteem of respondents	Pearson Correlation	.702(**)	1	-.186	.360
	Sig. (2-tailed)	.000		.326	.051
	N	150	150	150	150
sex of respondents	Pearson Correlation	-.044	-.186	1	-.200
	Sig. (2-tailed)	.819	.326		.289
	N	150	150	150	150
educational status of respondents	Pearson Correlation	.502(**)	.360	-.200	1
	Sig. (2-tailed)	.005	.051	.289	
	N	150	150	150	150

\*\* Correlation is significant at the 0.01 level (2-tailed).

### 3.2.2. Sex and Self-Esteem

We used independent samples *t*-test to test our hypothesis about the relationship between sex and self-esteem. In the first output table, labeled Group statistics, displays descriptive statistics, that indicates males' mean of 28 with SD=5.22 and SE=1.35 as well as females' mean of 25.73, SD=7.07 and SE=1.82, which shows greater mean of males than females in their self-esteem.

The second output table, labeled independent samples test, it contains the statistics that are critical to evaluating the current research question. Regarding to equality of variances, equal variances is assumed since the significance value (sig=.07) is greater than 0.05: which can tell us as there is no significance difference between the two groups. On the other hand, in testing for the equality of means: Sig=.33 is greater than 0.05.

Therefore there was no statistically significance difference among individuals' in their level self-esteem between males and females.

#### T-Test

Table: 6. T-test for sex and self esteem

Group statistics				
sex of respondents	N	Mean	Std. Deviation	Std. Error Mean
Self-esteem of male respondents	75	28.00	5.224	1.349
female	75	25.73	7.066	1.824

#### Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Upper	Lower
Self-esteem of respondents	3.554	.070	.999	28	.326	2.267	2.269	-2.381	6.914
				25.783	.327	2.267	2.269	-2.399	6.932

### 3.2.3. Educational Status and Self-Esteem

As displayed in the t-test output Group Statistics table below, grade 10 have greater (29.07) mean with a SD=5.80 and SE=1.50. Whereas grade 9 have a mean of 24.67 lower than grade 10, with SD=6 and SE=1.55.

In the second output table of independent samples test, the significance level is .76 in testing for equality of variances that lead us to conclude as there was no significance difference between the two groups since  $p > .05$ . Taking equal variances assumed of Levene's Test for Equality of Variances, while testing equality of means; the test result with equal variances assumed indicated a sig. (.051) which is greater than .05. Thus, there was no statistically significance difference between grade 9 and 10 students in their self-esteem.

Table: 7. T-test for testing educational status and self esteem

**Group Statistics**

educational status of respondents	N	Mean	Std. Deviation	Std. Error Mean
Self-esteem of grade 9 respondents	75	24.67	5.996	1.548
grade 10	75	29.07	5.800	1.498

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Upper	Lower	
Self-esteem of respondents	.095	.760	-2.043	28	.051	-4.400	2.154	-8.812	.012	
			-2.043	27.969	.051	-4.400	2.154	-8.812	.012	

**5.1. Summary and Conclusion**

The study was conducted to examine the relationship between self-esteem and students' academic achievement. The study population consisted Entoto Amba secondary school students with sample size of 150 from randomly selected 10 sections. The test results indicated very high significant positive relationship between self-esteem and academic achievement and significant positive relationship between academic achievement and grade level of individuals. Besides no statistical significance difference was observed between sex variation and self-esteem and educational status and self-esteem.

The purpose of this study was to investigate the relationship between self-esteem and academic achievement of Entoto Amba secondary school students.

The first question that focused on the relationship between self-esteem and academic achievement showed very high positive and statistically significant correlation.

Regarding to the second and third research questions, viz. the variation of sex and self-esteem, and the variation in educational status and self-esteem were not shown statistical significant difference.

**5.2. Recommendations**

As stated in the summary part of this chapter, very high positive correlation between self-esteem and academic achievement and positive relationship between educational status and academic achievement was observed in this study. Hence, based on the results, the following recommendations are given:

- ❖ Students' self-esteem should be enhanced to improve their academic achievement through the involvement of responsible bodies such as teachers, parents, administrators and others.
- ❖ Students should participate in activities that could make them more effective so that developing their confidence and positive self-esteem.
- ❖ Other researchers should investigate on self-esteem and academic achievement of school adolescents with huge number of participants and vast coverage of study area.

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