

# Emotional Intelligence, Self-esteem and Gender as Correlate of Secondary School Students' Academic Achievement in Anambra State, Nigeria

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## ABSTRACT

**Aim of the Study:** The study aimed to explore academic achievement among secondary school students in the Anambra State Nigeria and was correlated with emotional intelligence, self-esteem, and gender. Researchers designed two null hypotheses and three study questions. The study followed a threshold of significance at .05 level. The research conducted in Nigera and specified by the region in the Anambra State educational zones of Onitsha and Awka.

**Methodology:** Correlational research designs were used for the study's design. All of the 263 public secondary schools in Anambra state's year two senior secondary school (SSS2) students made up the study's population. The study's sample consisted of (N=1,028) participants drawn from 18 secondary schools in the Onitsha and Awka education zones using a non-proportionate stratified random sampling technique. The Emotional Intelligence Questionnaire (EIQ), a structured questionnaire intended to gather information on a student's emotional intelligence, a Self-Esteem Inventory (SEI), and a Mathematics and English Language Achievement Test are among the devices used for data gathering (MEAT). Two professionals validated the instrument's face and content. Multiple regression was used to evaluate the hypotheses while the research questions were analyzed utilizing the Pearson Product Moment Correlation Coefficient (Pearson r).

**Findings & Conclusion:** The study's findings demonstrated a substantial correlation between secondary school students' academic success in mathematics and English language and emotional intelligence, self-esteem, and gender.

**Implication:** The government should conduct seminars and workshops for teachers to help them grasp the ideas of emotional intelligence and self-esteem in order to develop their own emotions and those of their students.

**Keywords:** Emotional Intelligence, Self-esteem, Secondary School Students' Academic Achievement.

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## Introduction

Teachers, counsellors, testing authorities, and others have been trying hard to solve the mystery of current poor academic performance in Nigeria and worldwide since academic achievement has become a major phenomenon that interests everyone. Araromi (2010) found that the best ways to raise academic standards and accomplishment are a concern for parents, guardians, teachers, institutions, and society at large. This is likely a result of the fact that education is crucial to the advancement of science, technology, socioeconomic development, and politics, as well as the overall transformation of an individual's life.

Accomplishment is the successful completion of a task or endeavour. It denotes the accomplishment of a task by the individual. Academic achievement, as defined by Gbonee (2014), is the accomplishment of an academic task by a student or teacher. A tool called the accomplishment test is used to measure achievement. This test evaluates what the student has learnt or the degree to which they have mastered certain skills (Fazura, & Ghazli, 2013).

In recent time, it is believed that intelligence quotient (IQ) is not the only type of intelligence that affects students' success (Goleman in Chijioke, 2016). The ability to monitor one's own and others' feelings and emotions, to recognise them, and to utilise this knowledge to inform one's decisions and actions is known as emotional intelligence (Adams, 2012). Understanding the significance of emotions and their relationships, as well as being able to use logic and problem-solving skills, is referred to as emotional intelligence (Hosseini, Mahmood, and Jila, 2017). The ability to notice emotions, digest emotion-related feelings, comprehend the content of those emotions, and manage them are all parts of emotional intelligence. The ability to achieve success in relationships with others and with oneself is known as emotional intelligence (Salau, 2012).

There are various emotional intelligence levels. High, moderate, and low levels are among them. According to research, students with high emotional intelligence are more likely than those with low emotional intelligence skills to perform better on activities requiring emotions. To support this assertion, Eze & Ezeahurukwe (2015) found that kids with high emotional quotients display pro-social behaviours as well as good social relationships with classmates and teachers, stay in the educational system for a longer period of time and perform better academically. Trust, interest, intention, self-control, linked needs, communication capability, and cooperative ability are essential components of this understanding. All of these characteristics are facets of emotional intelligence.

Self-esteem is another aspect that influences academic success. He feels valued and satisfied with himself personally (Adams, 2012). Self-esteem refers to one's perception of oneself, including how much one likes oneself, whether they are satisfied with their accomplishments, and how one feels about society, education, and family. It also refers to how closely one's ideal self and actual self resemble one another (Hosseini, Mahmood, & Jila, 2017). The degree of legitimacy, approval, acceptance, and worthiness a person feels towards themselves is known as self-esteem (Vanderzenden, 2018). A basic need for mental relaxation and one on which our level of life pleasure heavily depends is a sense of self-worth and self-esteem.

In the context of this study, self-esteem is defined as the belief, perception and opinion individuals have about themselves which influences their behaviours and consequently affect their achievements in life. Self-esteem could be high or low. When individuals have high self-esteem, they tend to feel positive about themselves and about life in general.

Research has shown that self-esteem is influenced by factors such as gender and age. For example, it was reported that female students' self-esteem is generally lower than males' self-esteem. Similarly, boys have been found to demonstrate a slightly higher level of self-esteem than girls (Okafor, Obi, & Oguzie, 2018).

Effects or affects associated with being male or female are referred to as gender. The term "gender" is frequently used to describe the distinction between male and female characteristics in respect to expected roles. According to earlier research, there are no appreciable gender disparities in students' achievement

of cognitive, affective, and psychomotor skills in the subjects of chemistry, mathematics, and science (Onah, 2011). However in their individual research, Kolawole (2017), Maliha (2011), and Sharei, Kazemi, and Jafari (2012) discovered that male students outperformed female students in terms of cognitive, emotional, and psychomotor skills.

Oludipe (2012) argued that gender had no discernible effect on children' ability in science, however Igboegwu and Okonkwo (2012) found that boys had significantly higher scores than females between the ages of 9, 13, and 17, in science, maths, and reading assessments. These studies' findings about whether or not females and males learn differently are equivocal. Given the controversy surrounding the impact of gender differences on academic achievement, it is crucial to determine whether there is a connection between gender and the academic success of secondary school students in the state of Anambra, and more importantly, whether there is a connection between students' emotional intelligence, self-esteem, gender, and academic success in mathematics and English.

### ***Statement of the Problem***

Several investigations have linked pupils' low performance in math and English to their lack of interest in the subjects and the subsequent dread that makes them see the subjects as challenging. The relationship between emotional intelligence, self-esteem, and academic achievement of secondary school students has been the subject of studies, but the findings are conflicting. Little has been done to ascertain the relationship between emotional intelligence, self-esteem, and academic achievement of secondary school students. There are no much empirical studies to the best knowledge of the researcher that sought to determine the relationship between emotional intelligence, self-esteem, gender and students' academic achievement in Mathematics and English language in Anambra state. Hence, the gap that the present study intends to fill is stated in question form: "is emotional intelligence and self-esteem related with academic achievement of secondary school students in Anambra State?"

### ***Study Objectives***

The objective of this study is to determine the relationship between emotional intelligence, self-esteem, gender and academic achievement in Mathematics and English language, of senior secondary school students in Anambra State.

### ***Research Questions***

The following research questions are posed to guide the study:

1. How does emotional intelligence, self-esteem, and academic accomplishment of secondary school students in Anambra state in Mathematics and English Language relate to one another?
2. How do emotional intelligence, self-esteem, gender, and academic achievement of secondary school students in mathematics in the state of Anambra relate to one another?
3. How do emotional intelligence, self-esteem, gender, and academic success among English-language secondary school students in Anambra State relate to one another?

### ***Hypotheses***

- H01: It is more likely that emotional intelligence, self-esteem, gender, and academic success of secondary school students in mathematics in Anambra state do not significantly correlate with one another.
- H02: It is more likely that emotional intelligence, self-esteem, gender, and academic success of secondary school pupils in English in the state of Anambra do not significantly correlate with one another.

## Methodology

### Research Design

For this study, correlational research designs were used. 10,573 senior secondary school pupils from the 263 public secondary schools in the state of Anambra made up the study's population (Post Primary School Service Commission, Awka. 2020). There are six (6) education zones in Anambra state.

### Sample Size

The study's sample, 1,028 pupils (546 men and 482 females), was drawn from 18 schools in the Onitsha and Awka education zones using a non-proportionate stratified random selection technique (nine schools from each education zone).

### Data Collection Tool

The Emotional Intelligence Questionnaire (EIQ), a structured questionnaire intended to gather information on a student's emotional intelligence, a Self-Esteem Inventory (SEI), and a Mathematics and English Language Achievement Test are among the tools used for data gathering (MEAT). The Senior Secondary Education Curriculum's Senior Secondary School Two (SSS2) Scheme is the source of the items for the Mathematics and English Language Achievement Test (MEAT). Emotional Intelligence Questionnaire (EIQ) was developed using Mayer and Salovey's concepts (1995). Gray-Little, Williams, and Hancock's versions of the Rosenberg Self-Esteem Scale were incorporated to create the Self-Esteem Inventory (SEI) (1997). For each item, a four-point rating scale with the categories Often, Frequently, Occasionally, and Never was connected.

### Validity & Results

Three specialists from Chukwuemeka Odumegwu Ojukwu University's department of Educational Foundations approved the instrument's face and content. State of Anambra. The study issues were analysed using the Pearson Product Moment Correlation Coefficient (Pearson  $r$ ), and multiple regression was used to assess the hypotheses at the .05 level of significance. The data were analysed using SPSS version 23.

### Results

**Research Question 1:** How does emotional intelligence, self-esteem, and academic accomplishment of secondary school students in Anambra state in Mathematics and English Language relate to one another?

Table 1: *The correlation coefficient (r) between emotional intelligence, self-esteem, and academic achievement in English and mathematics for secondary school pupils.*

Variation	N	Mathematics	English	.r <sup>2</sup>	Remarks
Emotional Intelligence	1028	.884		.781	Very strong relationship
Self-esteem	1028		.680	.462	Strong relationship
	1028	.733		.532	Strong relationship
	1028		.532	.283	Moderate relationship

The results demonstrated a high positive association between emotional intelligence and academic accomplishment in English Language ( $r=0.680$ ) and a very strong positive relationship between emotional intelligence and academic achievement in Mathematics ( $r=0.884$ ). The coefficient of determination ( $r^2=0.781$ ) explains that emotional intelligence can account for 78.1% of the total variability in academic achievement in mathematics, while the coefficient of determination ( $r^2=0.462$ ) reveals that emotional intelligence can account for 46.2% of the total variability in academic achievement in English language.

In a similar vein, self-esteem and academic accomplishment in mathematics showed a high positive link ( $R=0.733$ ), whereas academic achievement in English showed a somewhat favourable relationship

(R=0.532). According to the coefficient of determination ( $r^2=0.532$ ), self-esteem accounts for 53.2% of the total variability in academic achievement in mathematics, while the coefficient of determination ( $r^2=0.283$ ) shows that self-esteem accounts for 28.3% of the total variability in academic achievement in English language.

**Research Question 2:** How do emotional intelligence, self-esteem, gender, and academic achievement of secondary school students in mathematics in the state of Anambra relate to one another?

**Table 2:** Analysis of regression showing the connection between secondary school students' academic success in mathematics and their emotional intelligence, self-esteem, and gender

R	R Square	R <sup>2</sup> Adjusted	Remark
0.562	0.315	0.314	Moderate positive relationship

Table 2 shows that a moderate positive relationship of 0.562 exist among secondary school students' emotional intelligence, self-esteem, gender jointly with their academic achievement in Mathematics.

**Research Question 3:** How do emotional intelligence, self-esteem, gender, and academic success among English-language secondary school students in Anambra State relate to one another?

**Table 3:** Summary of regression analysis on how emotional intelligence, self-esteem, gender, and academic achievement relate to one another in secondary school pupils studying English

R	R Square	R <sup>2</sup> Adjusted	Remark
0.656	0.430	0.429	High positive relationship

Table 8 shows that a high positive relationship of 0.656 exist among secondary school students' emotional intelligence, self-esteem, gender with their academic achievement in English language.

### Test of Hypotheses

**Ho1:** It is more likely that emotional intelligence, self-esteem, gender, and academic success of secondary school students in mathematics in Anambra state do not significantly correlate with one another.

**Table 4:** An overview of the regression analysis of the correlation between secondary school students' academic success in Mathematics and their emotional intelligence, self-esteem, and gender

N	R	Rsquare	R <sup>2</sup> adjusted	df	Cal. F	Pvalue	Remark
1028	0.562	0.315	0.314	1026	514.79	0.000	S

\*S-significant

Table 4 shows that the null hypothesis is not supported at the 0.05 level of significance when the estimated F 514.79 has a P value of 0.000, which is less than 0.05, with a 3 df numerator and 1026 df denominator. This suggests that there is no connection between secondary school pupils' academic success in mathematics and their emotional intelligence, self-esteem, or gender in Anambra state.

**Ho2:** It is more likely that emotional intelligence, self-esteem, gender, and academic success of secondary school pupils in English in the state of Anambra do not significantly correlate with one another.

Table 5: Summary of regression analysis on how emotional intelligence, self-esteem, gender, and academic achievement relate to one another in secondary school pupils studying English

N	R	Rsquare	R <sup>2</sup> adjusted	df	Cal. F	Pvalue	Remark
1028	0.656	0.430	0.429	1026	314.122	0.000	S

\*S-significant

Table 5 shows that the null hypothesis is rejected at the 0.05 level of significance when the estimated F 314.122 has a P value of 0.000, which is less than 0.05 with a 3 df numerator and 1026 df denominator. Research suggests that emotional intelligence, self-esteem, gender, and academic achievement of secondary school students in English language in Anambra state are significantly correlated.

## Discussion

The analysis described in hypothesis one's conclusion revealed that there is no correlation between secondary school students' academic achievement in mathematics and emotional intelligence, self-esteem, or gender. And hypothesis two demonstrated a substantial correlation between secondary school students' academic achievement in English language and their emotional intelligence, self-esteem, and gender.

This finding is consistent with research from Oludipe (2012), Igboegwu and Okonkwo (2012), and Svetlana (2018) regarding the relationship between emotional intelligence and academic success of male and female secondary school students. These studies found that while both sexes performed equally well in English language, male students outperformed female students in mathematics, science, and social science, while female students outperformed male students in the arts. Students' academic success and self-esteem are both influenced by gender, according to Salami's (2013) investigation of these topics among university students. The causes of gender disparities can be traced to a number of variables, including family influences, ambition, ideologies, interests, attitudes, stereotypes, and problems with school teachers that may have an impact on female students' achievement.

## Conclusion

It has been determined that pupils' emotional intelligence and self-esteem are unrelated to their academic success. Also, there are no discernible differences between male and female pupils' emotional intelligence. Also, it is found that female students in English Language have stronger emotional intelligence and self-esteem than male students.

## Recommendations

Based on the findings, the following recommendations were made:

- 1 Secondary school teachers, educational psychologists and school counsellors should recognize that self-esteem and emotional intelligence are significant factors in the academic achievement of students and therefore fashion out programmes that will help build and maintain healthy self-esteem among their students so as to enable them achieve better academic excellence.
- 2 It was suggested that the government host seminars and workshops for teachers so they can learn about the notions of emotional intelligence and self-esteem and develop both their own and their pupils' emotions.
- 3 Gender equality should be promoted by math and English language teachers, who should also encourage the employment of practises that boost confidence in both men and women.

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## Conflict of Interest


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