

SCHOOL LOCATION AS A DETERMINANT OF ACADEMIC SELF-CONCEPT AMONG STUDENTS IN SECONDARY SCHOOLS IN SOKOTO STATE, NIGERIA

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Abstract

This study assessed students' academic self-concept in relation to school location in Sokoto State. Employing a descriptive survey design, the study's population comprised 139 senior secondary schools with a total of 65,927 students. A sample size of 382 students was selected using a multi-stage sampling procedure. The instrument, a 38-item questionnaire, was an adapted Academic Self-Concept Scale. Both descriptive statistics and an independent t-test were used to analyze the collected data. The study revealed that: (1) Sokoto State secondary school students have a moderate level of academic self-concept; and (2) there is a significant difference in students' academic self-concept between urban and rural secondary schools in Sokoto State. Among other recommendations, the study suggests that the government launch special programs to increase students' academic self-concept, as it is crucial for educational adjustment. It also recommends that Sokoto State secondary schools, especially those in rural areas, be provided with adequate facilities to help students improve their academic self-concept and achieve higher educational outcomes.

Keywords: Academic Self-concept, School Location, and Secondary School

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Introduction

Students' academic self-concept at the secondary school level plays an important role in producing quality graduates who will be valuable assets to a country. In educational institutions, academic performance refers to the outcome of educational goals achieved by students or teachers—how well a student meets standards set by local authorities or the institution itself (Nalah, 2014). Self-concept has become an important subject in psychology due to its influence on students' behavior and performance. Given the emphasis on educational attainment in Nigeria, studying the influence of self-concept on academic performance has been a significant undertaking. Both positive and negative academic self-concept are related to students' academic output. Academic performance is considered an outcome of students' academic self-concept, which is a subdivision of general self-concept.

According to Laryea et al. (2014), academic self-concept research is an important component of academic motivation research. Academic self-concept, according to Cooley (2009), encompasses a comparative component in which students assess their academic attitudes and skills compared to other students. Academic self-concept has been strongly linked to academic performance (Ahmad & Bruinma, 2006). According

to Marsh et al. (2005), academic self-concept is an important psychological construct because it has been found to be both a cause and an effect of students' academic performance. A higher academic self-concept has been associated with greater academic achievement (Ahmad & Bruinma, 2006). Some students attribute their academic success or failure to the type of school they attended. The type of school can impact students' academic and school-related achievements. Different school types include single-sex (boys only or girls only), co-educational or mixed (both boys and girls), day or boarding, and urban or rural schools.

It has been observed that the performance of public secondary schools in Sokoto State is not encouraging and could be attributed to low academic self-concept among students. Some students in public secondary schools appear to lack confidence in facing academic challenges within and outside the school environment. Because schools vary and have different characteristics, the type of school students attend may impact their academic self-concept, thus affecting their school-related achievements. Many of the reviewed research studies showed no evidence of studies conducted in Sokoto State on academic self-concept, particularly in relation to school type and environment. This was identified as a research gap requiring the attention of scholars and researchers. Hence, this study investigates academic self-concept among secondary school students in Sokoto State and examines whether there is a difference in academic self-concept based on school type and location.

Research Objectives

The following are the objectives of this study:

1. To find out the level of academic self-concept among secondary school students in Sokoto State.
2. To find out the difference in student's academic self-concept between urban and rural secondary schools in Sokoto State.

Research Questions

The following research questions were set to guide the study:

1. What is the level of academic self-concept among secondary school students in Sokoto State?
2. What is the difference in student's academic self-concept between urban and rural secondary schools in Sokoto State?

Research Hypothesis

The following null hypothesis was formulated for the study and was tested at 0.05 level of significance.

- H₀₁. There is no significant difference in student's academic self-concept between urban and rural secondary schools in Sokoto State.

Literature Review

Academic self-concept can generally be defined as a student's belief about their academic ability and how their academic standing compares to their peers (Srivastava & Joshi, 2011). Haktanir et al. (2018) also view academic self-concept as a combination of an individual's cognitive and affective judgments about their academic abilities, as well as their perceptions of how others view them. Academic self-concept is maintained to provide stability to an individual's sense of self and is not restricted to the present, but also representative of one's past and future hopes (Dunkel et al., 2010). Similar views are presented by Ordaz-Villegas et al. (2014), who define academic self-concept as students' perception of their own academic ability. Rossen (in Blegur et al., 2018) sees it as an important factor in educational attainment.

Academic self-concept is one construct that generally portrays learners' academic traits (Blegur et al., 2018). According to Matuvo (2012), students with high academic self-concept have high academic confidence at different levels of study. Academic self-concept increases with age, exhibiting developmental trends that shape academic activities. Learning should begin with the intrinsic encouragement of learners to recognize their academic qualities. Students' learning efforts exist because they are aware of their academic qualities and achievements (Blegur et al., 2018). Academic self-concept is a construct concerned with one's attitudes, feelings, and perceptions about one's intellectual or academic capabilities, representing one's self-beliefs and self-feeling in academic settings. Similarly, academic motivation is a construct recognized for its influence on students' interest in and attitude toward learning, compelling them to work hard to achieve mastery and academic excellence. Academic beliefs and academic efforts are two important components of students' academic self-concept (Liu & Wang, 2005).

Academic self-concept is formed and developed through interaction with others, such as educators, peers, and parents (Rossen, 2010). Marsh et al. (2000) revealed that students' academic self-concept can increase and be enhanced through interaction with high achievers in the classroom. Academic self-concept is described as involving a description and an evaluation of students' perceived academic abilities, encompassing global beliefs of self-worth associated with their perceived academic competence (Liu & Wang, 2005). Every student, whether positively or negatively inclined, has an academic self-concept about their curriculum, study habits, and examinations, relating to the various subjects they are learning (Minchekar, 2019). A student's academic self-concept develops and evolves as they grow. Some scholars believe that academic self-concept begins developing in early childhood (ages 3 to 5) due to parental, family, and school environment influences, while others believe it commences around age 7 or 8, when students begin evaluating their academic abilities based on feedback from parents, teachers, and friends. By age 10 or 11, students view their academic abilities by comparing their performance with that of their peers. These social comparisons are also referred to as self-estimates (Liu & Wang, 2005), which are frequently used to help students form an idea of who they are academically (Minchekar, 2019). Multiple social factors contribute to the development of academic self-concept, and developing a positive academic self-concept has been linked to students' behavior and emotions in other areas of their lives, such as happiness, self-esteem, and concern (Minchekar, 2019). However, the level of effort students put into learning contributes significantly to boosting their academic self-concept.

Wankhade (2016) conducted a study comparing self-concept between rural and urban adolescents. Using a 48-item test that yielded scores in eight dimensions of self-concept and a total score, the study compared 25 rural and 25 urban adolescent students. The results indicated that the mean and standard deviation for self-concept in rural students were 30.64 and 3.52, respectively, while in urban students, they were 34.28 and 2.851, respectively. This means there was a significant difference between rural and urban students, as the calculated t-value (4.016) was greater than the tabulated t-value (2.01) at the 0.05 level. The study also showed significant differences in health and physique, temperamental qualities, academic status, intellectual abilities, habits and behavior, mental health, and socio-economic status between rural and urban adolescents.

Methodology

This study employed a descriptive survey design using a quantitative approach. The population consisted of all 65,927 students in the 139 senior secondary schools in Sokoto State. A multi-stage sampling procedure was used to select the sample. First, 12 boarding schools (6 rural and 6 urban) and 12 day schools (6 rural and 6 urban) were selected using purposive sampling. Based on the population of 65,927 students, a sample size of 382 was determined using The Research Advisors (2006) table. Therefore, the sample comprised 382 students from various categories of senior secondary schools in Sokoto State.

The research instrument was an adapted academic self-concept measuring scale entitled the Secondary School Academic Self-Concept Measuring Scale (SSASMS). Initially, the SSASMS consisted of 48 items using a four-point Likert scale. These items were categorized into four subsections: Self-Concept of Academic Ability (12 items), Self-Concept of Academic Interest (12 items), Self-Concept of Study (12 items), and Self-Concept of Examination (12 items). The instrument was validated by experts in educational psychology, test and measurement, and research methodology in the Faculty of Education and Extension Services, the Faculty of Social Sciences, and lecturers in the Department of Statistics, Usmanu Danfodiyo University, Sokoto. Cronbach's alpha (α) was used to test the scale's reliability, yielding a reliability index of 0.79. Only 38 items were deemed valid and suitable for the scale.

Results and Discussions

Data for this study were analyzed using frequency counts, percentages, means, standard deviations, and independent t-tests. Frequency counts, percentages, means, and standard deviations were used to answer the research questions, while independent t-tests were used to test the null hypotheses.

Research Question One: What is the level of academic self-concept among secondary school students in Sokoto State?

The level of academic self-concept is divided into three categories, Low academic self-concept, moderate academic self-concept and high academic self-concept. The minimum score on the scale was 38 and the maximum was 152. Therefore, the decision rule is as follows:

- i. Decision I: A score between 38 and 75 is considered as low academic self-concept.
- ii. Decision II: A score between 76 and 113 is considered as moderate academic self-concept
- iii. Decision III: A score between 114 and 152 is considered as high academic self-concept.

This research question is presented and analyzed in Table 1.

Table 1: Level of Academic Self-Concept among Students in Sokoto State Secondary Schools.

S/No	Level of Self-concept	Frequency	Percent	Valid Percent	Cumulative Percent
1.	Low	6	1.6	1.6	1.6
2.	Moderate	316	82.7	82.7	84.3
3.	High	60	15.7	15.7	100.0

Source: Researcher Field Work, 2024.

Table 1 summarizes the frequency and percentage calculations used to determine the level of academic self-concept among students in Sokoto State secondary schools. The data analysis revealed that, out of 382 students, 6 (1.6%) fall under low academic self-concept, 316 (82.7%) fall under moderate academic self-concept, and 60 (15.7%) fall under high academic self-concept. Therefore, since the majority of students have a moderate academic self-concept, it can be generalized that most students in Sokoto State secondary schools have a moderate level of academic self-concept.

Research Question Two: What is the difference in student's academic self-concept between urban and rural secondary schools in Sokoto State?

This research question is presented and analyzed in Table 2.

Table 2: Urban and Rural School Academic Self-concept

Variables	N	Mean	Standard Deviation	Mean Difference
Urban schools	243	103.97	11.61	5.81
Rural schools	139	98.16	9.80	

Source: Researcher Field Work, 2024.

Table 2 presents the mean and standard deviation used to determine the difference in students' academic self-concept between urban and rural secondary schools in Sokoto State. The data analysis revealed a mean difference of 5.81 between the academic self-concept of students from urban and rural secondary schools. Urban schools (N=243, mean=103.97, SD=11.609) had a higher mean score than rural schools (N=139, mean=98.16, SD=9.804). Therefore, the mean difference of 5.81, favoring urban school students, indicates that students from urban schools have a higher academic self-concept than students in rural secondary schools in Sokoto State.

The findings in Table 2 indicate that the level of academic self-concept among secondary school students in Sokoto State is moderate, meaning they have an average academic self-concept. According to Matuvo (2012), students with a high academic self-concept have high academic confidence at different study levels. This implies that students need to improve their academic self-concept to face academic challenges confidently. Marsh et al. (2000) revealed that students' academic self-concept can increase and be enhanced through interaction with high achievers in the classroom. They also found that below-average students' academic self-concept is often negatively affected when the performance of the high-achieving group, with whom they are placed for academic improvement, is good. These results suggest that care must be taken when students with different academic self-concept levels are mixed for academic activities (such as assignments, tests, practicals, etc.) because it may discourage students with average academic self-concept, causing them to rely on the success of high achievers and hindering their own academic self-concept development. Blegur et al. (2018) found that academic self-concept increases with age, exhibiting developmental trends. This means that students with low academic self-concept have the potential to improve, especially if they are made aware of their own academic qualities and learning achievements.

Research Hypothesis: There is no significant difference in students' academic self-concept between urban and rural secondary schools in Sokoto State.

The data for this hypothesis is presented in table 3.

Table 3: Students' Academic Self-concept between Urban and Rural Secondary Schools

Variable	N	Mean	SD	df	t-value	P-value	Remark
Urban schools	243	103.97	11.609	380	4.975	0.008	H03
Rural schools	139	98.16	9.804				Rejected
Total	382						

Source: Researcher Field Work, 2024.

Table 3 presents the results of an independent t-test conducted to compare the mean scores of students from urban and rural secondary schools in Sokoto State in relation to their academic self-concept. The analysis indicated a significant mean difference of 5.81 between students from urban schools (N = 243, mean = 103.97, SD = 11.609) and those from rural schools (N = 139, mean = 98.16, SD = 9.804). The analysis also revealed a calculated t-value of 4.975 with 380 degrees of freedom and a p-value of 0.008 at a 0.05 level of significance ($t = 4.975, df = 380, \alpha = 0.05, p = 0.008$). Because the p-value of 0.008 is statistically lower than the significance level of 0.05 ($p < 0.05$), the null hypothesis three (H01), which stated that there is no significant difference in students' academic self-concept between urban and rural secondary schools in Sokoto State, is rejected. This means that there *is* a significant difference in students' academic self-concept between urban and rural secondary schools in Sokoto State.

The finding in Table 3 also revealed that there is *no* significant difference in students' academic self-concept between day and boarding secondary schools in Sokoto State. This suggests that secondary school students in Sokoto State have an average academic self-concept. This aligns with the findings of Martin et al. (2014), who found

predominant parity between boarding and day students on most outcome factors, with some modestly positive results favoring boarding students and no notable differences in gains or declines on outcomes between boarders and day students over one academic year.

Summary of the Findings

The following is the summary of findings:

1. The level of academic self-concept among secondary school students in Sokoto State is moderate, meaning they have an average academic self-concept.
2. There is a significant difference in students' academic self-concept between urban and rural secondary schools in Sokoto State. This indicates that the academic self-concept of students in urban secondary schools differs from that of students in rural secondary schools.

Conclusion

Given that students in Sokoto State secondary schools were found to have a moderate level of academic self-concept, it is likely that their academic performance is affected by this factor. The literature indicates that academic self-concept is a determinant of academic performance. Therefore, if Sokoto State is interested in improving student academic performance, academic self-concept should be given serious consideration.

Recommendations

Based on the results obtained in this study, the following recommendations were made:

1. Since most students in Sokoto State secondary schools have a moderate level of academic self-concept, the government should launch special programs designed to increase students' academic self-concept, as it is crucial for educational adjustment.
2. This study recommends that Sokoto State secondary schools, particularly those in rural areas, be provided with adequate teaching and learning facilities to help students improve their academic self-concept and achieve greater educational success.

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