INFLUENCE OF SENIOR SECONDARY SCHOOL GEOGRAPHY STUDENTS' MOTIVATION ON ACADEMIC ACHIEVEMENT IN BOSSO LOCAL GOVERNMENT AREA, NIGER STATE, NIGERIA

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Abstract

This study investigated whether or not students' motivation towards Geography can influence their academic achievement in Bosso Local Government Area of Niger State. two research question and one hypothesis were raised and tested at 0.05 levels of significance. The study adopted correlational research design. The population of the study consisted of one thousand five hundred and sixty (1,560) SSII Geography students from which a total of three hundred and six (306) students were sampled using simple random sampling technique. A 10 items "Geography Students Motivation Questionnaire" (GSMQ) were used for data collection. The GSMQ was validated by specialist in science education. The reliability GSMQ was established using Cronbach' Alpha and yielded reliability index of 0.83. The collected data were analyzed using SPSS Version 26 using Mean S.D., Scattered Plot and Kendal's Tau-B statistical tool. The findings of the study revealed that students' level of motivation was negative and that, motivation of the students had significant positive relationship with their academic achievement in Geography. The researcher therefore concluded that motivation can lead to high students' academic achievement in Geography and therefore recommended that Geography teachers should use instructional strategies that will motivate and bring positive attitude during the teaching/ learning of Geography to enhance students' achievement.

Key Words: Geography Students, Motivation, Academic Achievement

Introduction

As the world evolves it becomes imperative for man to know his immediate surrounding environment and beyond, this search is a result of an attempt to know more about the environment he lives on and what it is truly made up of, those occupying it in terms of the living organisms and nonliving physical features that exists on the earth's environment. These continuous struggle and quest to discover the earth by man began centuries ago to present times this struggle has gradually helped in shaping the ideas and knowledge about the earth giving rise to the study. Geography has over the years acquired an interesting dimension in senior secondary schools both in Africa and the rest of the world and the strategy adapted in teaching/ learning of the subject has been fine-

tuned to accommodate recent developments in the fields of science and technology Ologe, (2014). As a creative, problem solving, practical and intellectually stimulating school subject it goes beyond the study of the earth's surface to the scientific study of the planets and space technology. Thus, the important agent needed to handle and as well as manage successfully learning within the formal setting is the teacher. Empirically it has been observed in most of the developing countries, teachers are not adequately motivated due to the poor renumeration they received for the services rendered, this has grossly affected pedagogy in sciences and its related technological subjects in from the base level to secondary schools

Geography is the study of earth's physical features, human populations and the ways in which people interact with the environment (Nma, 2019). It includes the study of natural features such as mountains, rivers and oceans as well as human-made features like cities, transportation system. Geography as a science related discipline enable the learner to have true knowledge of the environment and all the inhabitants and the nonliving physical phenomenon that exist in the environment. The earth's environment consists of both living organisms and nonliving physical conditions, and together they all formed a life system support interacting with the environment for food, shelter, growth and development. In general, the environment can be seen as a life supporting system.

As a teaching and field-oriented subject taught widely at the senior secondary schools' levels up to the tertiary levels of education system, it is curriculum has purposely been reviewed and re-oriented over the years to one that critically finds scientific and practical solutions to problems encountered by man, especially in his relationship with the environment (Murtala, 2015). Additionally, Geography has contributed immensely to sciences and technological growth of nations of the world. Aina, (2013) defines science education as the study of all the related science subjects with teaching method in order to impart scientific knowledge to individuals or community. The importance of geography education for sustainable national development cannot be overemphasized as it finds its way into agriculture, biology, mathematics and other related fields (Jibo, 2020).

At the senior secondary school levels, greater percentage of students offers it, which serve as a preparatory ground for human development where career abilities are groomed, and potentials and talents discovered and energized. The study of geography both in tertiary and senior secondary schools helps to equipped the learners with useful concepts, principles and theories that will enable them face challenges before and after graduation.

Academic achievement can be viewed as a measure of what a person has accomplished after exposure to an educational programme. It is a means of accomplishment or proficiency of performance in a given skills or body of knowledge. Abdu, (2019) opined that students' academic achievement corresponds to their performance in school subjects as symbolized by a score on achievement test. It is commonly measured by means of examination or continuous assessments, it represents the level of success of the teaching and learning process, it indicates the extent to

which the established goal has been achieved, it also provides feedback to the teachers and students. Academic achievement of students in secondary schools has been a subject of concern by many people including parents, administrators, educators, psychologists and counselors. According to Adefarati, (2016), student's academic achievement depends on teaching method and learning environment. Using good teaching strategy by the teachers will make students have higher understanding, gain reasonable academic achievement and positive motivation.

Motivation is an internal drive that spurs one into action (Tus, 2020). It is an important psychological construct that drives a person action. Motivation is a strong desire or passion in a person that encourages the person to try and do something in order to succeed. Motivation affects student learning and plays an important role in directing behavior towards a certain goal, increasing the effort and energy towards a goal, increasing the initiative and perseverance of an activity, and improves individual performance. Teaching science in a fun and effective manner will increase students' motivation to learn science (Dan'inna & Bagiwa, 2020),). In addition, if teachers motivate the learners effectively the expected feedback from the students will be suitable because of the teaching approach adopted, this will further initiate students' interest, thereby making them to conceptualize and understand the importance of the content taught. When effective teaching/ learning occurred and the learners clearly understand the content of the topic they usually discuss within themselves by sharing the ideas learnt in clusters or group discussions it in classroom, this increases student's motivation enhances their performance and achievement. It has been observed from various studies that student's effort toward academic achievement is controlled by motivational factors such as interest, competence and autonomy.

Purpose of the Study

The purpose of the study is to determine the Influence of Motivation on Senior Secondary School Geography Students' Achievement in Bosso Local Government Area. Specifically, the objectives are set to:

i. examine the level of secondary school Geography students' motivation in Bosso Local Government, Niger State.
ii. determine the influence of secondary school Geography students' motivation on academic achievement in Bosso Local Government, Niger State.

Research Questions

The following research questions were raised to guide the study:

i. What is the level of senior secondary school Geography students' motivation in Bosso Local Government, Niger State?
ii. What is the relationship between senior secondary school Geography students' motivation and their academic achievement in Bosso Local Government, Niger State?

Null Hypotheses

The following null hypothesis was formulated and tested at 0.05 level of significance:

HO_1: There is no significant relationship between senior secondary school Geography students' motivation and their academic achievement in Bosso Local Government, Niger State?

Methodology

The design that was adopted for this study was a correlation design. A correlation research design was adopted because it seeks to establish the relationship among variables. The target population of the study comprised of SS 2 Geography students in eleven (11) public secondary schools in Bosso Local Government Area, Niger state, Nigeria. Simple random sampling technique was use to select six (6) publics secondary schools from the eleven (11) schools in Bosso Local Government Area of Niger State. The schools were selected using balloting. With a total number of one thousand and sixty students (1,060). The sample of the study was determined using the guidelines (sample size determination table) given by Krejcie and Morgan, (1970) which proposed that three hundred and six (306) subjects are considered appropriate for a population of one thousand five hundred and fifty (1,560). Therefore, three hundred and six (306) senior secondary school two (SSII) Geography students were sampled and took part in the study. Three hundred and six (306) SS II Geography students were randomly selected and participated in the study.

Geography Students Motivation Questionnaire (GSMQ) which was adapted from Science Motivation Questionnaire constructed by Mubeen and Reid (2014). The Questionnaire consisted of 10 items. The questionnaire is designed using a "Five- Choice Likert Scale". These are Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA) and Strongly Disagree (SD). The students were asked to freely indicate their motivation in Geography by simply ticking one of the five options that suit their motivation. Two (2) experts from Science Education at Federal University of Technology Minna validated the instrument. They examined the instrument appropriateness, suitability for the target population in terms of clarity, depth of coverage and simplicity of the language used. Their corrections were considered in the construction of the final instrument. The reliability of Geography Students Motivation Questionnaire (GSMQ) was established using Cronbach's Alpha method and the reliability index was 0.83. Data collected from the respondents were analyzed using Mean, Standard Deviation, and scattered plot, while Kendal Tau-B was used to test the null hypothesis formulated at .05 level of significance.

Results

Research Question One: What is the level of secondary school Geography students' motivation in Bosso Local Government, Niger State?

The data for answering the research question one is presented in Table 1.

Table 1: Level of Senior Secondary School Geography Students' Motivation in Bosso Local Government Area, Niger State

S/N	ITEMS	N	Mean	S.D	Decision
1	I take pleasure in learning Geography	300	3.22	0.84	Positive
2	My goals is to learn and be associated with Geography as a subject and career	300	2.83	0.97	Negative
3	It always concerns me when other students perform better in Geography	300	2.84	0.95	Negative
4	I find studying Geography interesting	300	3.65	0.62	Positive
5	Geography as a subject has realistic worth for me	300	3.66	0.25	Positive
6	I am confident in my abilities to perform well in Geography examinations	300	2.97	0.81	Negative
7	All I learn in Geography are important to my life	300	2.88	1.0	Negative
8	I enjoyed Geography lesson very well	300	2.74	0.4	Negative
9	I have strong urge and interest whenever I learn Geography	300	2.64	1.08	Negative
10	I am sure my capabilities and competencies in Geography are superb.	300	2.23	1.04	Negative
	Average	300	2.966	0.796	

Table 1 shows the Mean ($\bar{x}$) and Standard Deviation (σ) of Geography students' motivation in Bosso Local Government, Niger State. The result indicated that 7 out of the 10 items scores less than 3.0 below the decision mean while item 1, 4 and 5 scored more than 3.0 above decision mean and therefore indicates that, responses of students with regards to the level of motivation scores in Bosso Local Government of Niger State was low with an average Mean ($\bar{x}$) and SD (σ) of 2.966 and 0.796 respectively. This revealed that, Geography students possessed low or negative motivation.

Research Question Two: What is the relationship between secondary school Geography students' motivation and their academic achievement in Bosso Local Government, Niger State? To answer this research question, scattered plot was used and is presented in figure 4.1

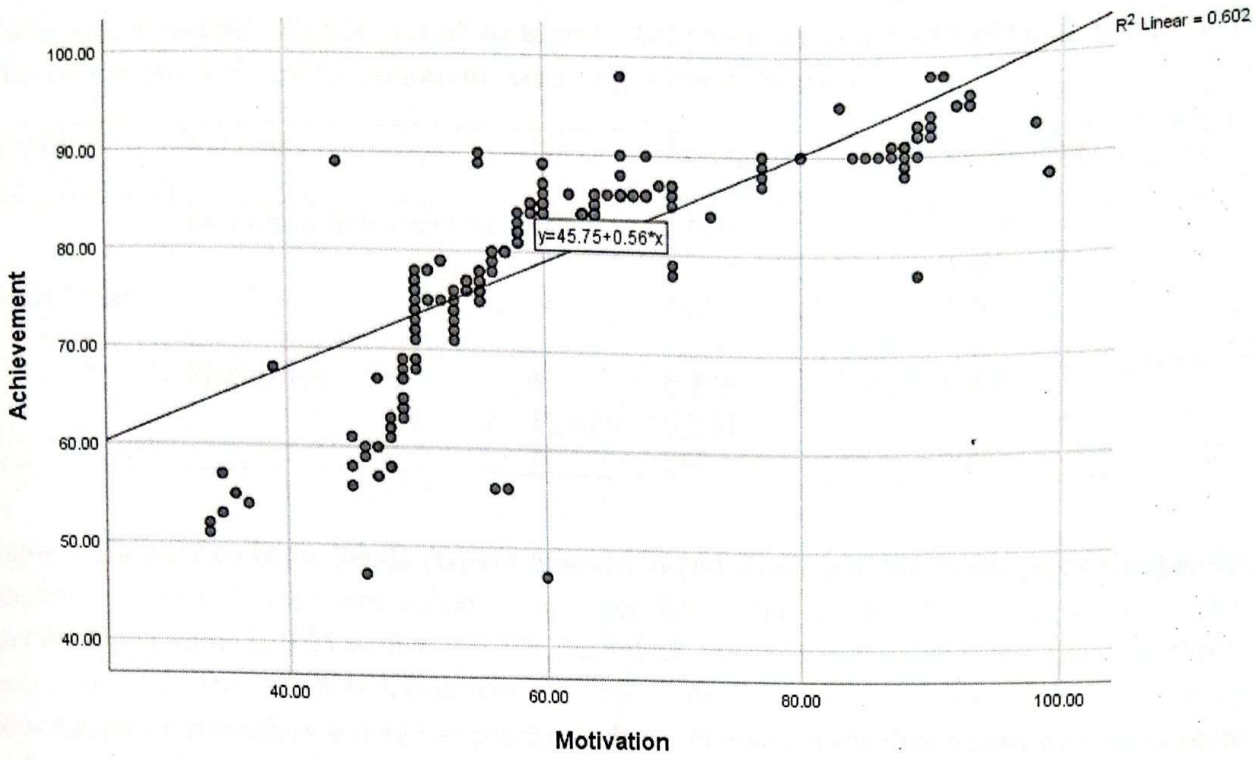

Figure 1: Simple Scattered Plot of Geography Student Academic Achievement and Motivation

Figure 1 shows the graph of simple scattered plot of Geography student academic achievement and motivation. It was revealed from the graph that there was strong positive relationship between Geography students' motivation and their academic achievement with a coefficient of determination of 0.602 indicating 60.2% of variation in students' academic achievement in Geography. This means that there was a positive relationship between motivation and students' academic achievement in Geography. Hence, the more students are motivated, the better they will perform in the subject.

Null Hypothesis Testing

HO_1: There is no significant relationship between secondary school Geography students' motivation and their academic achievement in Bosso Local Government Area, Niger State? To test this formulated hypothesis, Kendall Tau-B was used for analysis and the results presented in Table 2.

Table 4.3: Kendall's Tau-B (τ_b) of Academic Achievement and Motivation of Geography Students in Bosso Local Government Area, Niger State, Nigeria.

Statistic	Variables		Academic achievement	Motivation
Kendall's tau-B	Academic Achievement	τ_b	1.000	0.776
		P-value		0.000
		N	307	307
	Motivation	τ_b	0.776	1.000
		P_value	0.000	
		N	307	307

Table 2 shows Kendall's Tau-B (τ_b) for motivation and Academic Achievement of Geography Students in Bosso Local Government Area, Niger State, Nigeria. The observed p-value is 0.000 and the alpha-value is 0.05 with $\tau_b = 0.776$. Therefore, the observe p-value is less than the alpha-value and thus the null hypothesis was rejected. Therefore, there was significant relationship between senior secondary school Geography students' motivation and their academic achievement in Bosso Local Government Area, Niger State. (τ_b -cal= 0.776, p=0.000<0.05)

Summary of the Findings

i. Senior secondary school Geography students possesses negative motivation towards Geography in Bosso Local Government, Niger State.
ii. There was a significant relationship between senior secondary school Geography students' motivation and their academic achievement in Bosso Local Government, Niger State.

Discussion of the Findings

The finding of this study indicated that senior secondary school Geography students were in negative motivation in the subject. This finding is in agreement with the findings of Saleh (2014) and Rehman & Haider (2013) whom found that students possessed low and negative motivation towards science subjects. The reason is quite similar to the finding of this study, the nature of Geography teachers towards teaching of the subject rather than motivate the students to develop interest it has largely discourage the students' ability to employ and develop different skills in the process of learning. this is one of the major factor Geography teachers need to strongly improve upon, in that they need to complement in the cognitive and psychomotor use of skills and field/ practical to be conducted outside of the classroom for effective academic achievement.

The finding of this study revealed that there is significant relationship between Geography students' motivation and their academic achievement. This finding is in agreement with the findings of Mubeen and Reid (2014), Mohammed *et al* (2015), Çetin, (2015), Ugwuanyi *et al* (2020), Tus, (2020) who found that, high students' motivation might lead to high students' academic achievement. Thus, there is need for the teachers to explore different pedagogical

strategies by adopting the finding of this study in order to motivate the learners achieve high level of academic achievement.

Conclusion

Based on the findings of this study it was concluded that senior secondary school Geography students possess negative motivation towards the subject in Bosso Local Government, Niger State and having very weak positive relationship with classroom engagement while a strong positive relationship with academic achievement.

Recommendations

Based on the findings of this study, the researchers made the following recommendations.

1. Geography students should be taught in a fun and effective manner that will increase their motivation to learn the subjects adequately thereby improving their academic achievement.
2. Geography teachers should use instructional strategies that will motivate and enhance learner's classroom engagement during Geography instruction.
3. Field and excursion exercises should be organized from time to time by the geography teachers for the students, since it is believed that geographers laboratory is outside the classroom in the field and truly experimentation is best undertaken in the field.

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