ENVIRONMENTAL DETERMINANTS AND ACADEMIC ACHIEVEMENT OF JUNIOR SECONDARY SCHOOL STUDENTS IN ENGLISH LANGUAGE IN CALABAR SOUTH LOCAL GOVERNMENT AREA OF CROSS RIVER STATE, NIGERIA

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Abstract:

The research study focused on environmental determinants and academic achievement of junior secondary school students in English language in Calabar South Local Government Area of Cross River State, Nigeria. Two research questions and hypotheses were formulated and the research design used in this study was the survey method. The sampling technique adopted for this study was the simple random sampling technique with a population of 2,786 respondents. Sample comprised of two hundred and eighty five respondents (285) Junior Secondary School Students' in Calabar South Local Government area. The instrument used for data collection was a researchers' developed questionnaire tagged "Environmental determinants and Academic Achievement among Junior Secondary School Students questionnaire (EDAAQ)". Face validity was established through the help of two experts in Educational Foundations and Measurement and Evaluation in the Faculty of Education, Cross River University of Technology, Calabar. Split half reliability method was used to ascertain the degree of consistency of the test instrument and the coefficient alpha ranged from .75 to .78 which shows that the instrument is reliable. The data was analysed with and all hypotheses were tested at .05 level of significance. The findings revealed that class size does significantly influence academic achievement of Junior secondary schools students in English Language Also, there is a significant influence of family size on academic achievement of Junior secondary schools students in English Language

Key words: Environmental, determinants, Academic achievement, Junior secondary, English language

INTRODUCTION

English language occupies a prominent place in the Nigerian school curriculum. English language is one of the legacies of the British which will be difficult to do away with. Thus English language is paramount to the sustenance of millennium development goal. According to Suleman, Aslam and Hussain (2004) opined that education universally acknowledged as a fundamental stage. Since the quality of higher Education depends upon the quality achieved at this level, many countries of the world focus their

attention on exploring better solutions to the escalating and emerging problems encountered by adolescents at this level of education. It is therefore imperative to study academic achievement at the secondary school and identified those salient factors affecting, for enhanced students academic performance. Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments.

The classroom also plays a vital role in the students' academic performance in school this implies that the classroom environment is therefore a common playground hosting all these personalities at the same time. Classroom environment encompasses a broad range of educational concepts including the physical setting, the psychological environment created through social contexts and numerous instructional components related to the characteristics and behaviours. Falsario, Muyong and Neuvaespana (2014)) identified two aspects of classroom namely physical and social environment. According to them physical classroom environment refers to the arrangement of chairs, tables, fixtures and pieces of furniture, painting, lighting and ventilation while the social environment refers to the leadership exhibited by the teacher and the mode of students' participation and interaction.

Classroom environment provides students' with effective instruction and promotes smooth teaching-learning process and affect academic achievement positively. The power of the classroom environment is expressed in the formulation of situational interest as key factor in the enhancement of student engagement. In the light of this assertion, Kpolovie, Joe and Okoto (2014) situational interest is the affective reaction triggered by specific or appealing stimuli in the environment. It can be enhanced through the manipulation or modification of certain aspects of the learning environment and contextual factors such as teaching strategies, task presentation and structuring of learning experiences. This implies that a comfortable and welcoming classroom can foster learning and promote performance. Mushtaq and Khan (2012) identified internal and external classroom factors as factors strongly affecting students'

academic performance. The internal factors among others include class schedules, class size, textbooks, test results, learning facilities, teacher's role, environment of the class The classrooms are overcrowded, inadequate facilities, lack of qualified teachers, lack of chairs and benches and in some schools students sit on windows while the teacher barely have enough space to move about. In some schools roof tops have been blown off by rain storms and the government practically feels unconcerned. In this type of scenario, there is nothing attractive to lure the students to the school and they prefer to play away their time rather than coming into dilapidating classrooms.

To this end, empirical studies by Usman, Chukwuemeka and Madudili (2019) who sought to evaluate the effect of learning environment on academic performance of student's in Nigeria using a secondary research approach. Their specific purpose was to examine the concept of learning environment and its relationship with students' performance in Nigeria. Two research questions were tested with a sample of 346 respondents. The findings revealed that learning environment plays a significant student academic performance in Nigeria. Based on the findings, recommendation on the modalities to make the learning environment productive and competitive like adequate funding of the education sector, proper supervision of school activities and regular training/re-training of staff are suggested.

Stanley, Ezenwagu and Benignus (2020) determine some home environmental factors influencing the academic performance of secondary school students in Owerri Zone II, Imo State, Nigeria. Survey research design was adopted and two research questions guided the study. The population for the study comprises 1030 respondents made up of all the 64 principals and 966 teachers in the 32 public secondary schools in Owerri Zone II, Imo state. A sample of 206 respondents was selected randomly and this represents 20% of the respondents' population. The sample consists of 32 principals and 174 teachers in the study area. The instrument used for data collection was a questionnaire designed by the researchers. Face and content validity of the instrument was obtained after the appraisal and input made by two

experts; One in Measurement and Evaluation, and another in Educational Management and Policy, Faculty of Education Nnamdi Azikiwe University Awka. Corrections were made based on their observations before the instrument was approved for use. The reliability coefficient of the instrument was 0.89 using Charles spearman's rank correlation coefficient (Spearman's ρ). The analysis of the data revealed that some families lack modern mechanical or electronic devices, educational materials and supervision at home to enhance a student's academic performance. More so, some parents are unwilling to be involved in the academic performance of their children due to their socio- economic status. Recommendations such as giving proper orientation to the parents no matter their educational development and background, should devout time with their children and check their children's academic work, direct them where necessary, discuss the academic problems of their children with their teachers or school guidance, counselors so as to detect the students problem early enough and tackle it before it affects the students.

Osei, (2014) examined the school environmental factors that affect the academic performance of Senior High financial accounting students in the Tamale Metropolis of Ghana. Twenty nine (29) teachers and two hundred and sixty (260) financial accounting students from the seven (7) senior high schools in the municipality were selected for the study. It was a descriptive study where questionnaire was used to collect the data. The study revealed that availability of residential facilities in schools and instructional materials have a positive influence on the level of students' academic performance in financial accounting. Students who have access to relevant instructional materials such as recommended text books, ICT and library facilities use those materials to supplement their learning endeavours. The study also recommended that, government should put policy framework and structures in place in order to provide residential facilities to most day schools, if not all, and provide those schools with the necessary residential facilities.

Nsa, Offiong, Udo and Ikot (2014) study was designed to assess the relationship between school environmental variables and students' academic performance in Agricultural Science. The study adopted a correlational survey design. A sample size of 300 students were randomly selected and used for the study. To guide the study, two specific objectives and two null hypotheses were formulated and tested at 0.05 level of significance. Agricultural Academic Performance Test (AAPT) and Agricultural practical check-list were developed and used to gather data for the study. The instruments were validated by three research experts and the reliability coefficients of 0.82 and 0.78 were obtained using PPMC. Data were analysed and null hypotheses tested using PPMC. The findings indicated that there was significant relationship between availability of laboratory facilities and students' performance in Agricultural Science. There was also significant relationship between availability of farming facilities and academic performance of students. It was recommended that secondary schools should create more conducive environments that facilitate students' acquisition and development of cognitive, psychomotor and effective skills in their academic endeavour

Ezike (2018) study investigated classroom environment and students' academic interest as correlates of achievement in Senior Secondary Chemistry. Correlational design was adopted. 208 SS II students from ten randomly selected Public Secondary Schools in Ibadan Oyo State, Nigeria participated. Instruments include Classroom Environment Students' Questionnaire (r = 0.76), Students' Academic Interest Scale (r = 0.81) and Chemistry Achievement test (r = 0.85). Four null hypotheses were tested at.05 alpha level of significance. Pearson Product Moment Correlation and Multiple Regression Analysis were used for data analysis. Result showed significant relationships between classroom environment and academic achievement, students' academic interest and achievement in Chemistry. Composite contribution of classroom environment and academic interest was significant. However, classroom

environment better predicted achievement than students' academic interest. Conclusion was that the predictor variables are active correlates of achievement in Chemistry. Therefore it was recommended that all hands should be on deck in providing conducive school and classroom environments for learning, teachers and parents should create activities that will help develop and sustain interest of students. It is on the basis of this backdrop that the study intends to examine environmental determinants and academic achievement of junior secondary school students in English language in Calabar South Local Government Area of Cross River State, Nigeria.

Statement of problem

The rise in poor performance of students in English language has greatly affected the hopes and aspirations of many students in progressing into higher institutions. The direct fallout of this is dashing the great expectations of parents and other stakeholders in education. Accusing fingers have been pointed at the school system for being responsible while the school shifts the blame to the learners, government and parents. Literature reviewed in this study implicated so many factors beyond the ones identified above. In a country where the annual budgeting allocation for education is abysmally low (WESCO Bench Mark 26%) with the leaders displaying a gross nonchalant attitude, the state of our schools especially the public secondary schools is in total shambles. The classrooms are in a terrible deplorable conditions precipitating and provoking an acrid apathy among students and their teachers. This identified state or disrepair in the school environment and waning interest in the learners make this study imperative at this time of severe belt-tightening occasioned by nose diving economy in Nigeria. Therefore, the problem of this study was to examine the influence of some social variables such as class size and family size on academic achievement of junior secondary school students in Calabar South Local Government Area of Cross River State.

Research questions

1. To what extent does class size influences academic achievement of Junior Secondary school Students in English language in Calabar South Local Government Area, Cross River State, Nigeria?
2. How does noise influences academic achievement of Junior Secondary school Students in English language in Calabar South Local Government Area, Cross River State, Nigeria?

Research hypotheses

To provide a guide for this study, the following hypotheses were formulated based on the research questions posed;

1. Class size does not significantly influence academic achievement of Junior Secondary schools students in English language
2. Family size does not significantly influence academic achievement of Junior Secondary schools students in English language

Research Methods

The research design used in this study is the survey method. The survey method is a sub-category of the descriptive research design. This method was considered appropriate for the study, since the interest was, collecting original information from respondent. The populations of this study consist of all junior secondary schools in Calabar South Local Government Area. Which numbered 2,786 (Secondary Education Board, 2020). The sample for this study consisted of 285 junior secondary students. The sampling technique adopted for this study was the simple random sampling technique. According to Joshua Isangedighi simple random sampling technique is a means by which the researcher gives every members of his/her population equal and independent opportunity of being selected for the study. The instrument used for data collection was Environmental Factor and Academic Achievement among Junior Secondary School Students Questionnaire (EDAAQ). It was constructed by the researcher using the 4-point Likert scale. The aim of the questionnaire was to obtain first-hand information from teachers and

their working environments. The data required for this study were collected through actual visits to the selected schools and face-to-face distribution and administration of questionnaires. Face validity was established in this study. The split half coefficient estimate was adopted for the study and the coefficient alpha ranged from .75 to .78 which indicates that the instrument is reliable. The questionnaire was made up of (4) demographic information and 20 items. Section A made provision for personal information Section B focus on the environmental factor and academic achievement of students. Section C made up of the Achievement test The method of data analysis depend on each hypotheses formulated using independent t-test and one way Analysis of variance.

Presentation of results

The results of the data collected are presented hypothesis-by-hypothesis as shown below.

Hypothesis one

Class size does not significantly influence academic achievement of Junior secondary schools students in English Language. The independent variable in this hypothesis is class size which was categorized into high and low, while the dependent variable is academic achievement of students in English Language which was measured continuously. The independent t-test analysis was employed as presented in Table 1

Table 1

Result of independent t-test class size influence academic achievement

of Junior secondary schools students in English Language

Class size	N	Mean	Std. Deviation	df	t-test	p-value
Large	169	15.0055	2.81760			

				277	3.658	.012
Small	110	17.2143	7.17419			

*p<.05

The result in table 1 revealed that the t-cal of 3.658 is greater than the t-critical of 1.960. (p-value of .012 < .05). Thus the null hypothesis is rejected. This implies that class size has a significantly influence on academic achievement of junior secondary schools students in English Language.

Hypothesis two

There is no significant influence of family size on academic achievement of Junior secondary schools students in English Language. The independent variable in this hypothesis is family size which was categorized into 1-2, 3-4 and 5 and above, while the dependent variable is academic achievement of students in English Language which was measured continuously. The independent one way ANOVA was employed as presented in Table 2

Table 2: Result of One way ANOVE of the influence of family size academic achievement

of Junior secondary schools students in English Language

Family size	N	Mean	Std. Deviation	Std. Error
1-2 children	86	15.1977	2.57965	.27817
3.4 children	121	15.0579	2.98691	.27154
5 children and above	72	17.6944	8.17009	.96285
Total	279	15.7814	4.92083	.29460

Sources of variance	Sum of Squares	df	Mean Square	F	p-value.
Between Groups	356.151	2	178.075	7.709	.001
Within Groups	6375.512	276	23.100		
Total	6731.663	278			

*p<.05

The result in table 2 revealed that the F-cal value of 7.709 which was found to be greater than the F- cri of 4.63. Thus the null hypothesis is rejected. This implies that there is a significant influence of family size on academic achievement of Junior secondary schools students in English Language . To confirm the rejection, the fishers Least Significant Difference (LSD) was executed as presented in table 3

Table 3: Result of Fishers LSD on the influence of family size academic achievement of Junior

secondary schools students in English Language

Family size	Academic achievement in English Language	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1-2 children	3-4 children	.13982	.67787	.837	-1.1946	1.4743
	5 children and above	-2.49677*	.76774	.001	-4.0081	-.9854
3-4 children	1-2 children	-.13982	.67787	.837	-1.4743	1.1946
	5 children and above	-2.63659*	.71536	.000	-4.0448	-1.2283
5 children and above	1-2 children	2.49677*	.76774	.001	.9854	4.0081
	3-4 children	2.63659*	.71536	.000	1.2283	4.0448

*. The mean difference is significant at the 0.05 level.

The result in table 3 revealed that the mean difference lies in the category of 1-2 children and 5 children and above (2.49677*).

Discussions of Findings

The result revealed that there is a significant influence of class size on student academic achievement of students in English Language. The findings agree with Ezike (2018) study whose result showed significant relationships between classroom environment and academic achievement, students' academic interest and achievement in Chemistry. Composite contribution of classroom environment and academic interest was significant. However, classroom environment better predicted achievement than students' academic interest. Conclusion was that the predictor variables are active correlates of achievement in Chemistry.

It was also found that family type has a significant influence on the academic performance of students. The finding is in agreement with that of Stanley, Ezenwagu and Benignus (2020) revealed that some families lack modern mechanical or electronic devices, educational materials and supervision at home to enhance a student's academic performance. More so, some parents are unwilling to be involved in the academic performance of their children due to their socio- economic status. Recommendations such as giving proper orientation to the parents no matter their educational development and background, should devout time with their children and check their children's academic work, direct them where necessary, discuss the academic problems of their children with their teachers or school guidance, counselors so as to detect the students problem early enough and tackle it before it affects the students. Also, Nsa, Offiong, Udo and Ikot (2014) findings indicated that there was significant relationship between availability of laboratory facilities and students' performance in Agricultural Science. There was also significant relationship between availability of farming facilities and academic performance of students.

Summary

The role of the environmental predictors such as family size, and class size cannot be taking for granted in the academic environment. Thus, stake holders in the academic environment have mixed feelings as to the cause of student poor performance in English language. Thus the learning environment cannot be taking for granted. This is because it has a lasting impact on the students' cognitive, psychomotor and effective skills to the world of work. This study sought to environmental determinants and academic achievement of junior secondary school students in English language in Calabar south local government area of Cross River State, Nigeria. The study found out a significant influence of class size and family size on students' academic performance. Therefore, the need for enhance class size and students family should be taking into consideration in their quest for academic excellence.

Recommendations

The study makes the following recommendations:

1. Secondary Schools should ensure that students are being kept in a comfortable class room condition that facilitate students' acquisition and development of cognitive, psychomotor and affective skills.

2. Teachers should consider the home (family) environment and its influence on the child academic pursuit. Remedial services should be provided for the less privileged student whose parent cannot fully cater for their needs and aspirations in school.

Educational implication of environment determinants on students' performance

The study of environmental determinants and academic achievement is hoped for benefit in the following:

The study is expected to instill in the students the zeal to study and master English language. To the teachers, it would enable them to be committed by making adequate preparations of their lesson note and lesson plan. On the parts of parents, the feedback they get through their children's results is expected to motivate them to encourage their children in the requisition of the English language. To the educational planners, they would be most privilege because, the study will take the form of evaluation on what they have earlier planned, thereby putting into consideration the implementation of this study, problems faced by their schools within this language. Community and design appropriate instructional materials for effective teaching and learning of English language.

Finally, this work will be useful to the government. It will enable them to make available trained personnel both for English language and material resources for efficient implementation of the policy as the findings would geared them to make and provide learning facilities and such as conducive environment and other language laboratory to aid and motivate the students in the proper method of studying English language.

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