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Assessment of Child-Friendliness of Public Primary Schools and Pupils' Achievement in Mathematics in Rivers State, Nigeria

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Abstract: *Child-friendly School Initiative was introduced into Nigerian School System in the year 2000. It is a rights-based programme focusing on safe, conducive and healthy environment for greater enrollment and improved pupils' academic performance. Literature reveals paucity of empirical facts on the extent to which the programme had impacted on pupils' achievement in Nigeria and especially in Rivers State. This study therefore examined the extent to which schools in Rivers State, Nigeria are child friendly and the impact of the school friendliness on pupils' achievement in mathematics. Using both purposive and random sampling methods 41 primary schools were randomly selected from Obio-Akpor Local Government Area (OLGA), Rivers State, Nigeria. Two research instruments namely: Mathematics Achievement Test (MAT) which focused on primary five pupils and Measures of Child friendliness of Schools (MoCFS) were used. Majority of Primary Schools in the OLGA were fenced and secured. There were enough school buildings and classrooms. However water supply in most schools was inadequate and toilet facilities were not adequate. Most of the schools have scheduled time for sporting activities. Most schools had adequate teaching and learning materials. Primary five pupils did not do well in both mathematics multiple choice items and theory items. Extracurricular activities and nature of classrooms contributed significantly to pupils' performance in mathematics. School compound variable and teaching and learning materials had no significant contribution to the prediction of school average score in mathematics. On this basis of this result, government at the state and federal levels in Nigeria should continue to provide adequate teaching and learning materials for schools. School authorities should continue to encourage extracurricular activities such as sporting activities and encourage pupils to form clubs and societies in schools. Government should provide schools with good and ventilated classrooms. However, in order to improve the social wellbeing and health of the teachers and pupils amenities such as water and toilet facilities should also be provided.*

Keywords*: Child-friendly school, Teaching and learning materials, Primary school, School compound, Mathematics Achievement*

I. Introduction

As evidenced in international declarations and agreements such as the United Nations Educational, Scientific and Cultural Organization (UNESCO's) Education for All and United Nation's Millennium Development Goals 2 and 3, schooling is widely recognized as a primary mechanism for the economic and social development of nations. In fact, schooling is one of the most common ways through which societies prepare their children for the future and, perhaps this underlines the reason why countries have policies in place to guide and regulate the school system.

In Nigeria, for example, there is National Policy on Education which was formulated in 1977 by the then Federal Military Government of the Federal Republic of Nigeria (FRN) and is still being implemented. Although the National Policy on Education has been reviewed several times such as in 1995, 1998, 2004 and 2006, the spirit of the contents of the policy remains the same. The policy being implemented recognizes pre-primary, primary, secondary and tertiary levels of education and specific goals are set for each level of the school system. The national policy for education in Nigeria provides for a 6-3-3-4 structure. This translates into six years of primary schooling, three years of junior secondary, three years of senior secondary and four years of tertiary education. However in a further review in 2013, an additional one year was included to make for the formal inclusion of pre-primary education into primary education. The first ten years are therefore treated as a continuum of 10-year basic schooling which is offered in a seamless manner.

In this study the researchers focused only on primary school system. This level of education is for children between the ages of six to 11 years (Federal Ministry of Education, Nigeria, 2015). The main goals of the primary school education system are to:

1. Inculcate permanent literacy, numeracy and ability to communicate effectively;
2. Lay a sound basis for scientific and reflective thinking, and
3. Develop in the child the ability to adapt to his changing environment among others.

In a bid to achieve these goals, the National Policy on Education (FGN, 2004) specified that the primary education should be tuition free, universal and compulsory. The curriculum was expanded to inculcate

functional literacy, numeracy and life skills in children, such as, the teaching of: English language, the language of the locality, mathematics, science, and physical/health education. However, the questions remain: How child friendly are the primary schools in Nigeria? Does the primary schools environment encourage pupils' enrollment and completion rate of primary school education? Do the schools environments encourage pupils' attendance?

According to Education For All 2015 National Review (Federal Ministry of Education, [FME] 2015), between 2009 and 2013, the number of primary schools in Nigeria rose from 58,595 to 61,305, an increase of 5 per cent. In the National Review, it is stated that as at 2012, the population of children in public primary schools in Nigeria is about 24 Million. Increased enrollment rates have created challenges in ensuring quality education and satisfactory learning achievement as resources are spread more thinly across a growing number of pupils and schools. It is not rare to see cases of 100 pupils per teacher or school children sitting under trees outside the school building because of the lack of classrooms. However, this situation is being addressed by current efforts of the Nigerian Government with the implementation of the Basic Education scheme. The compulsory, free Universal Basic Education (UBE) Act was passed into law in 2004 and represents the Government's strategy to fight illiteracy and extend basic education opportunities to all children in the country.

A major factor which tends to influence children enrolment and completion rate is the school learning environment. If the school learning environment is hostile, it is likely to affect attendance of children in school. A child friendly school environment is characterized by adequate security for the classroom and school buildings when the school closes for the day or term and availability of teaching learning materials. It is on record that some miscreants do turn unfenced school compounds to Indian hemp smoking arena. Records have also shown that these miscreants defecate in the classrooms and break pupils and teacher's desk and chairs.

Improving primary school pupils' achievement is vital for our nation's competitiveness in modern day world order. Scientific research (such as Cheryan, Zigler, Plant, and Meltzoft, 2014) shows how the physical classroom environment influences student achievement. Two key findings of Cheryan, Zigler, Plant, and Meltzoft, 2014 were that the building's structural facilities profoundly influence learning and that inadequate lighting, noise, low air quality, and deficient heating in the classroom are significantly related to worse student achievement.

The facility's structural features—inadequate lighting, noise, poor air quality, and deficient heating—can undermine learning. The classroom's symbols, such as objects and décor, also influence student achievement. Research (such as Crampto, 2009; Duran-Narucki, 2008) shows that inadequate school facilities are related to worse test scores, even when taking into account (by statistically controlling for) the socioeconomic status and racial makeup of students.

Moreover, child friendly school learning environment encourages pupils' participation in extra and co curricular activities. In such schools pupils have the opportunity to engage in sporting activities, literary and debating activities and join clubs such as Boys Scout and Girls Guild. Many extracurricular activities have proven to be beneficial in building and strengthening academic achievement, even if the activities are not obviously related to academic subjects (Marsh & Kleitman, 2002). "A number of studies revealed that students participating in extracurricular activities did better academically than students who did not participate" (Marsh & Kleitman, 2002). Researchers have particularly studied the relationship between extracurricular activities and academic performance in adolescents. One study found that "adolescents who participated in extracurricular activities reported higher grades, more positive attitudes toward school, and higher academic aspirations" (Darling, Caldwell, & Smith, 2005, para. 1).

A growing body of research (such as Chritenson & Therlow, 2004; Greenberg, Skidmore & Rhodes, 2004; Osher & Kendziora, 2010; Godfrey, Osher, Williams, Wolf, Berg, Torrente, Spier, Aber, 2012) suggests that improving the quality of the learning environment can improve attendance and learning, decrease the likelihood of dropping out of school and reduce antisocial and unhealthy behaviours, fostering the development of the whole child and providing greater opportunities for life-long success.

This research is premised on the Child Friendly Schools (CFS) Initiative of the education section of UNICEF's Programme Office. In 1999, UNICEF initiated CFS to respond to the global need for improvement in quality schooling. The CFS framework is driven by child-rights philosophy that views the role of schools as promoting the development of the whole child. The framework was grounded in a number of international human rights instrument and declarations, particularly the 1990 convention on the Rights of the Child and the Declaration for Education for All. In addition, it was informed by the World Health Organisation's emphasis on connectedness, caring and access to support; UNICEFs interest in child-, family-, and community-centered approaches to school improvement; and research on school effectiveness emphasizing the important role school factors play in the development of children, particularly those from disadvantaged backgrounds (UNICEF, 2009F).

Based on these perspectives, three key inter-related principles form the core of the CFS framework: child-centeredness, democratic participation and inclusiveness (UNICEF, 2009f).

Child-centeredness

The principle of child-centeredness means that safe-guarding the interest of the child should be central to all decision-making in education. It translates to school features such as a child-centered pedagogy in which children are active participants and a healthy, safe and protective learning environment provided through appropriate school architecture, services, policies and action.

Democratic participation

The principle of democratic participation maintains that as rights holders, children and those who facilitate their rights should have a say in the form and substance of their education. This principle is represented in schools with policies and services that support fairness, non discrimination and participation, where there are strong links between home, school, and community, and in which children, families and communities are active participants in schools and school decision-making.

Inclusiveness

The principle of inclusiveness holds that all children have a right to education and that access to education is not a privilege that a society grants to some children, but a duty it fulfils to all. Inclusive schools have policies that encourage attendance and retention, are girl-friendly, gender sensitive and open to children with disabilities and are child-seeking, inclusive and welcoming for students of all background.

Although the three principles are very important, in this study, the researcher focuses on the child-centeredness of the primary schools in Rivers State, Nigeria. As stated in the preceding section, CFS is a child's rights-based program focusing on safe, conducive and healthy school environment, teachers'/other stakeholders' involvement for greater enrollment and improved student performance amongst others. Despite these laudable policies in place, evidence abounds that noble goals of compulsory and universal primary education are far from being realized, as many children of school age are either not in schools, or never made it to school, while some that did, dropped out without completing their studies. This phenomenon, according to Maduewesi (2005) may not be unconnected with unfriendly nature of some primary schools' environment.

Some primary schools in Nigeria, according to Maiyashi (2001) and Maduewesi (2005), are being operated in un-conducive environment, while others lack the basic facilities necessary for quality education. Equally, World Bank's (2004) report revealed that there is a critical shortage of material resources in the educational system in Nigeria. This grim picture painted of the national state of school environment repeats itself at the state level. Enueme (2004), for example, reported that facilities in majority of the primary schools in Delta State were either not available or not adequate. In 2000, UNICEF identified its major challenge in Nigeria as one that involved getting more children into schools, offering an education of good quality, and developing schools that are friendly to children. This is 2016. Is the situation still the same and obtainable in Rivers State?

Having been introduced to Nigeria for about 16 years ago, not much research has been conducted on the impact of child friendly school initiative on student or school performance in Nigeria and indeed in Rivers State. A few early reports such as Emuene (2004), Maduewesi (2005) in Nigeria have appropriately focused on formative evaluations designed to document planning and implementation activities, determine teacher acceptance of the initiative, galvanize public support for the initiative, and encourage capacity development. Emuene's 2004 study has attempted to document the effectiveness of child-friendly, gender sensitive schools, including impact on student performance. However the study focused on girls' achievement and relied on a systematic, longitudinal analysis of school records of students' grades from school-based, teacher-designed, end-of-school-year promotion examinations to make judgments about the progress of students' academic performance.

Child friendly school initiative is being implemented by UNICEF in several countries. Nigeria needs empirical evidence on which to base judgments about the effects of the Child-Friendly Initiative on improvement of learning environment and student achievement. The purpose of this study, therefore, is to assess the child-friendliness of primary schools in Rivers State and examine the extent to which the child friendliness of the school relates to pupils' performance in mathematics.

II. Research Questions

1. What is the level of security of Primary Schools in Rivers State, Nigeria?
2. How conducive are the schools compounds in terms of facilities such as

a. school building?
b. water?
c. toilet?

3. To what extent do schools engage pupils in extracurricular activities in terms of:

a. sporting activities?
b. clubs and societies?

4. How conducive are the classrooms in terms of
a. Ventilation?
b. Lightening?
c. Desks and chairs?
d. classroom spaces
5. Are teaching and learning materials such as a. chalk board b. educative charts and models available in the classrooms?
6. What is the average performance of the pupils in Mathematics?
7. Is the average performance of the pupils related to:
a. conduciveness of the school compound?
b. extracurricular activities in the school
c. nature of the classroom
d. availability of teaching and learning materials in the classrooms

The information gathered in this study was relevant in several ways. One, results of the study would serve as progress report on the effectiveness of the Child Friendly School Initiative of UNICEF and highlight the need to extend the implementation of the initiative to all schools in Nigeria. In addition, the study would contribute to the limited body of knowledge in the area. Furthermore, it has relevance for educational policy in terms of movement toward the attainment of national goals for education.

III. METHODS

Population and Sample

All primary schools and pupils in Rivers State were targeted. However for the selection of schools and pupils samples for the study, multistage sampling technique was employed. Stage One: In Rivers State, there are 23 local Government Areas. However, Obio-Akpor Local Government Area was purposively chosen because the researchers want the sample to be homogenous. That is, the researchers being not interested in location, and to have homogenous sample of schools and participants the researcher decided to purposively chose Obio-Akpor Local Government Area which incidentally falls within Port Harcourt, the capital city of Rivers State. Stage Two: Random sampling technique was used to pick primary five pupils. Stage three: In Obio-Akpor local Government Area, there are 48 Primary schools out of which 41 were randomly selected. Stage Four: In each of the schools sampled, all primary five classrooms were surveyed. Moreover all pupils in the class responded to the Mathematics Achievement Test. In all the pupils sample was1856

Variables of the Study

Independent Variables

a. Conduciveness of school compound
b. Nature of the class room
c. Extracurricular Activities
d. Availability of functional clubs and society
e. Availability of teaching and learning materials

Dependent Variables

i. Pupils' Achievement in Mathematics

Instrumentation

Two instruments were used. These were:
1. Measure of Child-friendliness of School
2. Mathematics Achievement Test.

Measure of Child-friendliness of School (MoCFS): The MoCFS was developed to measure child-friendliness of the school. It consisted of two sections: A and B. Section A deals with demographic data such as name of school, Local Government Area, Class, Number of boys and girls in the classroom, and the gender of the teacher class. Section B consists of four sections dealing with conduciveness of the school compound, extracurricular activities which the school engages in, nature of the classroom and teaching and learning materials. The reliability index of the instrument was determined by using Cronbach Alpha method. The value was 0.85.

Mathematics Achievement Test (MAT): The MAT was developed to measure pupils' knowledge and understanding of mathematics. It consisted of twenty multiple choice test items and five short answers essay test items. The multiple choice test items were placed on three response mode of A, B, and C. The items were

dichotomously scored. Each item answered correctly attracted one mark, while item answered incorrectly attracted 0. The difficulty level of each item ranged from 0.46 and 0.73, while the discriminating indices ranged from 0.36 and 0.48. The reliability index of the MAT was determined using the KR-20 Formula, and the value was 0.75. The essay test was scored with the aid of marking guide. Each item attracted five marks. The test blue print for the multiple choice items was developed.

Method of Data Collection: The researchers employed the services of three research assistants. Each research assistant visited 10 schools. Each research assistant visited a school twice. On the first visit, in each school, the research assistant observed the school compound and the primary five classrooms and filled the MoCFS accordingly. He or she also solicited the assistance of the class teacher to fill aspects that were not observable such as availability of function clubs and societies. On the second visit, the research assistant administered the MAT on the Primary five pupils in the school. The time allowed for the administration of the MAT was One hour thirty minutes.

Method of Data Analysis: Data collected were analysed using frequency counts, percentages, mean and standard deviation. For the relation between the independent variables and dependent variable, Pearson Correlation Coefficient and Multiple Regression Analysis were used. The test of significance of relationship was set at $p < 0.05$.

IV. Results

The results are hereby presented in the order in which the research questions were stated.

***Research Question One*:** How secured are Primary Schools in Rivers State, Nigeria?
To answer this question the research assistants were asked to observe and record the number of schools visited that were fenced or not fenced; and if fenced to note the condition in which the fence was. In all the 41 schools visited, it was observed that 29 (70.7%) schools had fence, while 12 (29. 3%) had no fence. However, it was observed that out of 29 schools that had fence, five (50.6%) schools had dilapidated fence while 24 (49.4%) had their wall still intact.

***Research Question Two*:** How conducive are the school compounds in terms of provision of:
a. school building?
b. water?
c. toilet facilities?

A. Conduciveness of School Building

To determine the conduciveness of the school buildings, the researchers looked at the adequacy of classrooms. To determine the adequacy, the pupils' population was divided by the number of classrooms available. When the average ratio of the population of pupils in the school to the number of classrooms was less than or equal to (50 to 1) ($\leq$ 50: 1), the school was regarded as having enough school buildings and therefore such school is said to be conducive.

In the 41 schools visited, it was observed that 36 (87.8 %) schools had enough buildings and therefore conducive. Five schools (12.2%) had no enough buildings.

B. Conduciveness in Terms of Provisions of Water

To determine the conduciveness of the schools, the researcher looked at the availability of water in the school. This could be in terms of pipe borne water, taps or deep wells.
Results show that only six (14.6%) schools have tap water, 19 (46.3%) have deep wells while 16 (39.1%) schools do not have provisions for water.

C. Conduciveness in Terms of Provision of Toilets

To determine how conducive the school compounds were, the researchers looked at the availability of toilets. For a school to be categorized as being conducive there must be a separate toilet for male and female pupils and one for the teachers.

Results show that only five schools (21.4%) have separate toilets for male pupils, female pupils and teachers. Such schools were categorized as being conducive. The remaining 36 (78.6%) schools either have only one or two toilets for staff and pupils.

***Research Question Three*:** To what extent do schools engage in extracurricular activities in terms of:
a. sporting activities?
b. clubs and societies?

A. Sporting Activities

To determine the extent to which school engage in sporting activities, the respondents were asked to state if the school had schedule time for sporting activities, if the school had functional football team and volley ball team. The respondents were also asked to state whether they had inter house sporting activities in the last five years.

Majority of the schools (about 72% of the schools; 30) have scheduled time for sporting activities. About halve of the schools sampled (20 schools [50%] had football team. However only five (1.2%) schools had functional volley ball team, while 36 (97.9%) of the schools sampled had no functional volley ball team.

In the last five years, most of the schools (85.5%) sampled held inter house sports competition.

B. Clubs and Societies

To assess the child friendly nature of the schools, respondents were asked to state if schools have functional clubs and societies such as Boys Brigade, Girls Guild, Sheriff Guild, Literary and Debating Society, Press Club and Science Club, were available or not in the school. Table 1 shows the responses of the schools sampled.

Table 1: Availability of Clubs and Societies

Clubs and Societies	Available	Not Available
1.Boys Brigade	02 (4.8)	39 (95.2)
2.Girls Guild	07 (17.1)	34 (82.9)
3.Sheriff Guild	00 (0.0)	41 (100.0)
4.Literary and Debating society	02 (4.8)	39 (95.2)
5.Press Club	01 (2.4)	40 (97.6)
6.Science Club	01 (2.4)	40 (97.6)

From table 1, it is evident that most of the schools sampled did not have functional clubs and societies.

***Research Question Four*:** How conducive are the classrooms in terms of
a. Ventilation?
b. Lightening?
c. Desks and chairs?
d. classroom spaces

To determine how conducive the classrooms were, the researcher looked at ventilation, lightening, number of desks and chairs and classroom spaces. For ventilation, the classroom must have enough windows. In this aspect, all the classrooms sampled (100%) had good ventilation. The classrooms were airy. Since the classrooms were airy, lightening in each classroom was good also. In terms of chairs and desks for the pupils, the number of desks and chairs and the number of pupils in each class were noted. When the ratio of pupils in the class to the number of desks and chairs is equal or less than three, we can assume that there are enough desks and chairs. In each of the classrooms sampled, the ratio fluctuated between 2 and 3 to 1. This suggests that the number of desks and chairs in each classroom was adequate.

The dimensions of most classrooms sampled were 25 feet by 40 feet. Since in each of the schools sampled, the maximum number of pupils in each class was 50, it could be taken that the classrooms were conducive.

***Research Question Five*:** Are teaching and learning materials such as a. chalk board b. educative charts and models available in the classrooms?

To assess the child friendly nature of the schools in terms of availability of teaching and learning materials, the research assistants were asked to observe and state if materials such as chalk/white board, educative charts and models were available and pupils have direct access to them. Table 2 shows the responses of the schools sampled.

Table 2: Availability of Teaching and Learning Materials

Materials	Available	Not Available
1.Chalk Boards	41 (100.0)	00 (0.0)
2.Mathematical Models and Charts	25 (61.0)	16 (39.0)

Number in parentheses represents percentages
From table 2, it is evident that most of the schools sampled have teaching and learning materials.
***Research Question Six*:** What is the average performance of the pupils in Mathematics? In this study, school was the unit of analysis; therefore each school's average score in mathematics achievement test was noted.

Table 3 presents the descriptive statistics

Table 3: Descriptive statistics of Pupils' Score in Mathematics Test

	Number	Minimum	Maximum	Mean	SD
Objective Test	41	4.00	18.00	9.57	3.76
Theory Test	41	3.00	6.00	4.31	1.07

From table 4.3, it can be observed that pupils did not do well in both mathematics multiple choice items and theory items. Out of 30 items in the multiple choice section, the school average score was 9.57 while in the theory section, out of 20 marks allotted, the school average score was 4.31.

***Research Question Seven*:** Is the average performance of the pupils related to:
a. conduciveness of the school compound?
b. extracurricular activities in the school
c. nature of the classroom
d. availability of teaching and learning materials in the classrooms

To answer this question, zero order correlation coefficients between the average performance of pupils in each school and each of the predictors (conduciveness of the school compound, extracurricular activities in the school, nature of the classroom and availability of teaching and learning materials in the classrooms) were calculated. Results showed that the relationship between average performance of pupils in each school and conduciveness of the school compound was low 0.142, but significant $p < 0.05$. That between average performance of pupils in each school and extracurricular activities in the school was very high 0.414 and significant $p < 0.05$. That between average performance of pupils in each school and nature of the classroom was low 0.046 while that between average performance of pupils in each school and teaching and learning materials in the classrooms was high 0.174 and significant, $p < 0.05$.

Multiple regression analysis was conducted with the mathematics score as the dependent variable and summated scores of the schools in conduciveness of the school compound, extracurricular activities in the school, nature of the classroom, availability of teaching and learning materials in the classrooms as the independent variable.

Tables 4, 5, and 6 present model summary, Regression ANOVA and Coefficients respectively.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.401[a]	0.161	0.144	3.574

From table 4, it is evident that the four independent variables jointly predicted students' achievement in mathematics. The coefficient of relationship (0.401) was positive and moderate. Moreover, the four independent variables jointly accounted for 16.1 % of the observed school average score in mathematics. The observed variance was statistically significant, $F(4, 36) = 8.159$, $p < 0.05$

To determine the individual contribution of the four independent variables Regression Coefficient was examined. This is as presented in Table 5

Table 5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-18.644	13.493		-1.382	.169
	SHLCOM	.496	.634	.094	.783	.435
	EXTACUR	1.502	.363	.389	4.133	.000
	NATCLASS	-.016	.004	-.425	-4.040	.000
	TEACLEAR	-2.198	1.472	-.255	-1.493	.137

Note: SHLCOM = School compound; EXTACUR = Extracurricular Activities; NATCLASS = Nature of Classrooms; TEACLEAR =Teaching and Learning Materials.

From table 6, it is clear that extracurricular activities ß = 0.389, t (39) = 4.133 and nature of classroom ß = - 0.425, t (39) = - 4.040 contributed significantly to the prediction model. It is quite interesting to note that school compound and teaching and learning materials had little contribution to the prediction of school average score in mathematics

V. Discussion

The results of this study show that extracurricular activities contributed significantly to pupils' achievement in mathematics. This is in line with the findings of pat studies such as Guest and Schneider (2003), Broh (2002) and Marsh and Kleitman (2002). This shows that the way children choose to spend their free time can affect their school performance; it is not simply traditional in-class instruction that impacts academic achievement. "A study by the U. S. Department of Education revealed that students who participate in co-curricular activities are three times more likely to have a grade point average of 3.0 or better" than students who do not participate in co-curricular activities (Stephens & Schaben, 2002).

Majority of the studies (such as Broh, 2002; Guest & Schneider, 2003) that have been conducted concerning the relationship between extracurricular activities and academic performance show that participation in extracurricular activities in general, is associated with an improved grade point average, higher educational aspirations, increased college attendance, and reduced absenteeism. Guest and Schneider (2003), in looking at the previous research on this subject said, "Researchers have found positive associations between extracurricular participation and academic achievement".

Improving primary school pupils' achievement is vital for our nation's competitiveness in modern day world order. Scientific research (such as Cheryan, Zigler, Plant, and Meltzoft, 2014) shows how the physical classroom environment influences student achievement. Two key findings of Cheryan, Zigler, Plant, and Meltzoft, 2014 were that the building's structural facilities profoundly influence learning and that inadequate lighting, noise, low air quality, and deficient heating in the classroom are significantly related to worse student achievement.

The results of this study show that classroom physical environments affect pupils' achievement in mathematics. These results are therefore in line with the findings of The facility's structural features—inadequate lighting, noise, poor air quality, and deficient heating—can undermine learning. The classroom's symbols, such as objects and décor, also influence student achievement. No doubt, inadequate school facilities are related to worse test scores, even when taking into account (by statistically controlling for) the socioeconomic status and racial makeup of students (Crampton, 2009; Durán-Narucki, 2008).

VI. Conclusion and suggestions

Results of this study show that majority of Primary Schools in Rivers State were fenced and secured. There were enough school buildings. However water supply in most schools was inadequate and toilet facilities were not adequate. Most of the schools did not have scheduled time for sporting activities. However, most of the schools had adequate teaching and learning materials. Primary five pupils did not do well in both mathematics multiple choice items and theory items. Extracurricular activities and nature of classrooms contributed significantly to pupils' performance in mathematics. School compound variable and teaching and learning materials had no significant contribution to the prediction of school average score in mathematics. On this basis of this result, government at the state and federal levels in Nigeria should continue to provide adequate teaching and learning materials for schools. School authorities should continue to encourage extracurricular activities such as sporting activities and encourage pupils to form clubs and societies in schools. Government should continue to provide schools with good and ventilated classrooms. However, in order to improve the social wellbeing and health of teachers and pupils, amenities such as water and toilet facilities should also be provided.

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