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Physical Learning Environment for Optimum Academic Performance: Implications for National Security

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Abstract

This study was carried out to bring to the limelight the relationship between the physical learning environment and the academic performance of students at the Basic Education Level and its implication for national security in Nigeria. A descriptive survey design was used in the study. The population of the study consisted of all teachers at the Basic Education Level in the Municipal Area Council of the Federal Capital Territory. There were one thousand two hundred and fifty-two (1,252) teachers at the Basic Education Level in the FCT. The sample size of the study was two hundred and ninety-one (291) teachers drawn from the population. Structured questionnaires were used to elicit responses from the respondents. The findings showed that a significant relationship existed between the physical learning environment and the academic performance of students. Also, students who learnt in a conducive environment performed better academically and were less likely to constitute a security risk to the larger society. The study recommended that concerted efforts be made by the government to provide an adequate and conducive environment for teaching and learning, especially at the Basic Education Level.

Keywords: Curriculum Implementation, Learning Environment, Academic Performance, Motivation, Basic Education.

Introduction

The right to education has been described as a basic human right. It was established in 1952, in Article 2 of the First Protocol to the European Convention on Human rights. It obliged all signatory parties to guarantee the right to Education. At the world level, the United Nations' International Covenant on Economic Social and Cultural Rights of 1966 guaranteed this right under its Article 13. (Wikipedia, 2009). However, there is the need to emphasize on the quality of education as it concerns learners. It is not only giving education to the citizens but how qualitative is the education. Have the government, states and the school administrators convincingly acknowledged what it takes to deliver quality education to the citizenry? Do the learners have a conducive learning environment? The answers to these pressing questions have huge implications for national

security and the development of Nigeria as a nation. These are questions that need urgent answers if we must achieve the objectives of education and a proper effective implementation of the curriculum at the Basic Education Level.

Education is a continuous process of experience and capacity development of learners which helps them to fulfill their desires in life. Agi and Yellowe (2013) posited that education was important to the development of human resources and the impartation of appropriate skills, knowledge and attitude. Furthermore, Nwabufo and Mamman (2015) defined education as a cultural process through which society ensured that necessary and desirable knowledge, skill, attitude and values were perpetuated through the teaching and learning processes. Hence, the physical learning environment of the learner is a contributory factor in achieving the goals of education and possibly contributing positively to his immediate community and society at large. An un-conducive learning environment can deter the growth and development of the learner thereby affecting the three learning gains of a learner which are affective, behavioural and cognitive. It should be noted that an individual who is not properly developed in these three domains might constitute a problem to his or her community and society, because the development of the various domains within the school system invariably reflects on their attitude and performance, both within and outside the school. Therefore, it is important and necessary for Federal, state, local government and school administrators to provide the necessary stimulus for learning to take place through an enabling physical school learning environment.

Basic Education is a prime level of education. The curriculum accommodates foundational subjects that can help the learner build skills which can make his life better in society. At every level of education, the success of the subjects depends on the effective implementation of the curriculum especially at the basic level. According to the National Policy on Education (2014), Basic Education is the education children received from early child care development to Junior Secondary Education. In order words, Basic Education comprises both pre-primary education, primary education, and Junior Secondary education. This is the education given to children aged 0-15, NPE. Consequently, Nigeria has been making significant efforts to place Basic Education on a sound footing through different policies. However, the physical school learning environment of public schools is not favourable enough for the teaching and learning processes. Most public schools have been neglected and relegated to the background especially those in the rural areas. The school environmental variables such as facilities, cleanliness of the school environment, standard classrooms, etc, are most predominant in government-owned schools (Mbagwu, 2015). These are what give

the private schools an edge over public schools and thereby make them look more superior to the public schools.

The standard of education across almost the levels of education in Nigeria today is suffering from the neglect of infrastructure that enhances the processes of teaching and learning. When a school environment is not conducive for teaching and learning, the primary objectives of education will not be achieved. If we must realize the educational goals in Nigeria, both the teachers and the students need an enabling environment to work cooperatively and productively towards the attainment of the goals. Most of the schools in Nigeria today are built without considering students with special needs, and they have not been restructured to fit in the students as they still struggle to find their place in the classroom. Nature can only provide the raw materials in the form of potential, but it is the environment that determines the extent of development (Umoh 2006). The school environment is therefore, the institution established to help the children to be more useful to themselves and the nation as a whole (Olaleye 2012). Conversely, the environment upon which the learner may be formally educated and attain educational goals should be a concern to the federal government, states, stakeholders, and school administrators.

The problem of national insecurity presently bedeviling the development of the country can be traced to the lack of the needed infrastructure and personnel in schools in Nigeria. In recent times, Nigeria has experienced a litany of security challenges, which range from communal to ethnic and religious. The situation assumed a dangerous dimension with the emergence of Boko-haram terrorists, bandits and kidnappers. The reason for all these vices in the society might not be unconnected to the poor teaching and learning environment within the school system in Nigeria. The poorly educated youth is a willing tool in the hands of politicians and criminals. Adequate and appropriate teaching and learning environment are needed for the optimum academic performance of students and their security.

There is urgent need to restructure the classrooms, especially at the Basic Education Level to make them conducive for teaching and learning. Although the falling standard in education might not only be attributed to the condition of the schools in terms of physical learning environment, it also includes so many other factors such as corruption, poor funding, change of government (especially at the states level) poor logistics, inadequate facilities, lack of qualified teachers, etc. However, students with special needs in Basic Education in Nigeria suffer most in schools especially now that Nigeria practices inclusive education. Private schools take advantage of the lack of infrastructure in government-owned schools to increase enrolment in theirs. Parents now prefer to send their children and wards

to private schools where they can be well attended to and probably where they feel more secure. Unless we address the blind spots especially in the areas of the physical school learning environment in our public schools, it will be very difficult to improve the quality of teaching and learning in the classrooms. It is important to note that some of the public schools have better infrastructures, and qualified teachers than the private schools. Some private schools lack qualified teachers, staff motivation and poor salary.

Statement of the Problem

It has been observed that the physical learning environment has been acknowledged as one of the factors that inhibit students in achieving the desirable diverse basic knowledge, attitude, and skills necessary for nation-building and the development of society which is one of the objectives of Basic Education in Nigeria. It has also been observed that the majority of government-owned Primary and Junior Secondary Schools in Nigeria are in a state of disrepair, with dilapidated buildings and poor infrastructures. This constitutes a major hindrance to the development of education in Nigeria. It is important to find out why this is the case. A poorly-equipped education sector will likely produce poorly educated citizens who will become security risks to society, hence, the need for a study on the physical learning environment in Nigerian schools and its implications for national security.

Purpose of the Study

The main purpose of this study was to examine the physical learning environment for optimum academic performance among Basic Education students in the Municipal Area Council of the Federal Capital Territory. The specific objectives were to:

1. find out the extent to which the school learning environment impacted on students' academic performance;
2. find out how the physical learning environment affected the teacher in the classroom situation; and
3. find out the relationship between the teaching and learning environment and national security.

Research Questions

This investigative work was guided accordingly by the following research questions:

1. To what extent does the school learning environment impact students' academic performance?

2. How does the physical learning environment affect the teacher in the classroom?
3. What is the relationship between the teaching and learning environment and national security?

The Concept of School Physical Learning Environment

School environment, according to Zais (2011), can be seen to include material and human resources and learning place that consists of the entire interactive setting like the classroom, workshop, library, field, and offices. He explained that a learning environment has a place where learning occured and was referred to as diverse physical locations, contexts, and cultures in the existing community that students learned in. This, directly or indirectly, affects the learning behaviour and performance of the student socially, psychologically and pedagogical. Sariola (2011) also viewed the learning environment as an environment for the teachers and students activities within which learning was seen as an active process in a multi-information and co-operational network environment.

The crucial need for an enabling physical learning environment for teaching and learning has been emphasized by many researchers. However, a conducive learning environment is not only for learners and the teachers but also for the effective implementation of the curriculum and what it is set to achieve. Therefore, it should be considered as a matter of urgency if we are to improve the learning concepts and the pedagogies that are applied to those concepts. A successful learning process in the school system today depends on how conducive the learning environment in terms of the physical environment. The environment of a school can contribute to the academic performance of the students positively only if it is conducive enough for teaching and learning. According to (Olaleye 2012), the physical learning environment refers to the physical characteristics of the school environment. In the school context, the physical environment includes the classrooms, hostels, offices, staff rooms and the physical structures of the school which comprise the architectural space, light, temperature and sound (Ezewu 2007). Given the impact of the learning environment on both the teachers and the students, previous studies have showed that the learning environment influenced students' attainment and their learning outcome.

Challenges of Unconducive Physical Learning Environment:

- Theft;
- Cheating in the examination halls due to lack of classrooms and seats;
- lack of concentration;

- overcrowded classrooms thereby making it difficult for the teacher to control;
- lack of preparation by the teacher;
- creating indecent behaviours, for instance, vandalizing school property through loopholes in the school, especially unfenced schools;
- physical injuries and lateness to school, because students know that there is an alternative way to enter in and exit the school compound whenever they want.
- Students, especially the females in the boarding house have suffered much harassment, toilet infections due to dilapidated buildings and facilities, insecurity, and loopholes in the school compound. These challenges continue to intensify without serious actions being taken to remedy them.

There is this belief that a positive learning environment makes the student comfortable, and removes struggles and frustrations from both the teacher and the student. A conducive and safe learning environment encourages students to internalize the contents thereby motivating them to do better in their performances, (Schieb and Karabenick 2011). Students cannot learn effectively in an environment where the facilities are not appropriate, especially in an inclusive system of education at the Basic Education level. This might result in classrooms' behaviour and distraction among the students. The government, states, stakeholders, community, and school administrators have a vital role in creating a positive and an enabling learning environment for the students if their academic performance must improve.

It has been months since schools were shut down due to the COVID-19 Pandemic; the questions now are what are the efforts the governments have put in place for resumption as anticipated? Are the students going back to meet the school worse than it was before? Or is the government going to restructure and renovate the schools before re-opening? This is the time for the government to look at the deficiencies and move to renovate the schools and put facilities in place following the rules given by the Nigeria Centre for Disease Control (NCDC) in preparation for re-opening. There is no doubt that one of the reasons why the government is still postponing the resumption of schools in Nigeria is due to an unconducive physical learning environment. This shows that the massive work in renovating and restructuring schools to comply with NCDC rules was caused by a long and an overdue neglect of public schools in Nigeria. These guidelines entail so much restructuring especially with overcrowded classrooms, inadequate classrooms, hostels, chairs, etc. All these were the challenges the government-owned schools faced in all levels of education even before the COVID-19 pandemic.

Considering the challenges which face the education sector in Nigeria, the learning environment has become necessary for every level of education, inclusively, especially with the guidelines from the NCDC. The government at all levels need to start retooling the teaching and learning processes by providing or restructuring the buildings, classrooms, chairs, etc. to avoid factors that can affect the teaching and learning processes. According to Udo and Ajala (2005), students who attend schools which provide a healthy mental/emotional environment are more likely to do well in their studies than those who attend schools that generate an unhealthy emotional/mental environment.

Physical Learning Environment and Academic Performance

A successfully managed school environment is necessary for, and essential to the academic improvement and development of the child. According to Ajao (2011), the quality of education does not only depend on teachers as reflected in the performances of their duties but also on the effective coordination of the learning environment. Generally, if the learning environment is not conducive, gaining the three domains of learning (cognitive, psychoactive and behavioural), will be difficult for learners to remain engrossed. Research increasingly shows that there is a clear link between the environment of the school and the academic performance of the students. The extent the learner can go in his performance is dependent on a couple of school variables such as adequate and spacious classrooms, workshops/laboratories, good water source/supply, light, toilet facilities, functional libraries, transportation, location of the school and availability of instructional facilities. This means that the facilities of a school are most important and a determinant factor for academic performance. Also, the school's physical learning environment can have a significant influence on and a relationship with students' behaviour and academic performance.

Learning resources can be classified to include human and non-human resources, Human resources are related to individual teachers who instruct the pupils in the class while non-human resources include instructional space along with the creation of a conducive teaching and learning environment (Nkom 2008). He further explained that Nigeria today faces the challenge of grossly inadequate facilities in almost all our public schools. This affects the quality of education drastically and is invariably the cause of poor performance among students who are the output. An enabling and a conducive learning environment allows for the proper implementation of the curriculum in a more realistic way that helps the learners and improves their academic performance.

Academic performance is the ability to study and remember facts, to study effectively and be able to think for yourself. It could be measured with formative

and summative results. According to Nara and Abdullah (2016), academic performance measures education outcomes. They stressed that it showed and measured the extent to which an educational institution, teachers, and students had achieved their educational goals. Bello (2016) opined that academic performance was the measurable and observable behaviour of a student within a specific period. He added that it consisted of scores obtained by a student in an assessment such as class exercise, class test and mid-semester, mock, and end of semester examinations. In other words, academic performance is the outcome of both formative and summative assessment. Students can obtain high grades and standardized test scores in school courses, especially courses that are part of the core academic curriculum (Louis 2012). Academic Performance Index (2010) revealed that academic performance was how students dealt with their studies and the responsibilities given to them by their teachers.

Research Design

A descriptive survey research design was deployed in carrying out the study. The research design is a systemic means of collecting data and describing the characteristics, features and facts about a given population using interviews, questionnaires, and observations for data collection.

Population

The targeted population of the study comprised one thousand, two hundred and fifty-two (1,252) Basic Education Teachers in the Federal Capital Territory (FCT). A sample size of Two hundred and ninety one (291) was drawn for the study.

Instrumentation

A researcher-structured questionnaire was used in obtaining information from the respondents. The questionnaire was titled: **Physical Learning Environment and Academic Performance Questionnaire** (**PLEAPQ**). The questionnaire was made up of a four-point modified scale after Likert of Strongly Agree (SA), Agree (A), Disagree (DA) and Strongly Disagree (SD).

Method of Data Collection

Both primary and secondary sources of data collection were used in gathering information for the study. The researcher and her assistant were briefed on the data collection procedure. The face to face method of administration of a structured questionnaire was implemented to ensure high return of the

questionnaires from the respondents. The permission of the heads of the study's selected school was got. Journals and relevant books were used in this study.

Method of Data Analysis

The statistical tools used in analysing the study is research questions were mean and standard deviation. The decision rule for mean was applied and as such, any mean score above 2.50 showed effectiveness while the mean score below 2.50 signified ineffectiveness. The responses were noted and then organized in relation to the research questions as stated above.

Results

Research Question 1: To what extent does school learning environment impact on students' academic performance?

Table 1: School learning environment and students' academic performance

S/N	Items	SA 4	A 3	SD 2	D 1	fx	— X	Decision
1	Conducive learning environment helps students to learn better	168	123	-	-	1,041	3.6	Agree
2	Students who learn in schools which are appropriately built and equipped perform better in examinations than students studying in dilapidated and ill-equipped schools	129	84	49	29	895	3.1	Agree
3	A school's good physical learning environment helps students to maximize their potential.	157	134	-	-	1,030	3.5	Agree
4	The physical learning environment does not affect the academic performance of students	85	82	98	26	808	2.8	Agree
	Section Mean						**3.3**	

Ohadiugha, M.N (2018). Unpublished Ph.D. Thesis, University of Abuja.

The result from Table 1 showed that the school learning environment impacted positively on the academic performance of students with a sectional mean score of 3.3 showing that the school environment had a lot to play in the performance of the students in their academic work. Based on the Table, a conducive learning environment helped the students learn better just as students who were taught in a well equipped and appropriate environment tended to do better compared to those in a dilapidated environment with outdated infrastructure. It also helped them maximize their potential as students and teachers.

Research Question 2: How does the physical learning environment affect the teacher in the classroom?

Table 2: Physical Learning Environment and the Classroom Teacher

S/N	Item	SA 4	A 3	SD 2	D 1	fx	— X	Decision
5	A conducive physical learning environment makes it easier for the teacher to do his job better	85	75	56	75	752	2.6	Agree
6.	Teachers are not interested in the condition of the environment were they teach.	42	52	38	159	559	1.9	Disagree
7	A standard physical learning environment makes for a better interaction between the teacher and the learner	210	81	-	-	1,083	3.7	Disagree
8	The nature of the physical and learning environment has no impact on the teachers, especially in the classroom.	72	45	139	35	736	2.5	Agree
	Section Mean						**2.7**	

Ohadiugha, M.N (2018). Unpublished Ph.D. Thesis, University of Abuja.

Table 2 addresses the physical learning environment and how it affected the teacher in the classroom. The sectional mean score of 2.7 and items 5, 7 and 8 whose mean score was above 2.5 showed that a conducive learning environment enhanced teachers' performance as well as created better interaction between the teacher and the students. Based on the Table, therefore, the physical environment of the school and the conducive learning environment brought out the better aspect of the teacher and best use of the learning resources.

Research Question 3: what is the relationship between theteaching and learning environment and national security?

Table 3: Learning Environment and National Security

S/N	Item	SA 4	A 3	D 2	SD 1	And befx	— X	Decision
9	Students who learn in a conducive learning environment are more likely to be responsible and law-abiding citizens	5	15	169	75	478	1.6	Disagree
10.	Students who attend schools which are dilapidated and without equipment are more susceptible to vices and violence than their counterparts in well-built and well-equipped schools	35	19	62	175	496	1.7	Disagree
11.	The school environment is as important as the quality of teachers and the curriculum	159	84	19	29	955	3.3	Agree
12.	The physical learning environment in schools has no bearing on national security	92	74	44	81	759	2.6	Agree
	Section Mean						**2.3**	

Ohadiugha, M.N (2018). Unpublished Ph.D. Thesis, University of Abuja.

Table 3 addressed the learning environment and national security in relation to students and teachers. Responses from item 9 disagreed with the fact that students who were taught in a conducive learning environment were not likely to be responsible citizens who obeyed the countrys' law and order. Also, the respondents were of the opinion that students who attended dilapidated schools were likely to break the laws in society. Items 11 and 12 were of the opinion that the school environment was as important as the quality of teachers and lastly, the physical learning environment in schools had nothing to do with national security or the behavior of the teachers.

Based on the above, the school learning environment had nothing to do with national security or the behaviours of the teachers and the students in respect of the Table's section mean of 2.3 below the cutoff mean score of 2.5

Discussion of Findings

Based on the findings of the three research questions, the following deductions were derived from the study.

Research question one in Table 1 showed that the school learning environment impacted positively on the academic performance of students. A section mean score of 3.3 as above the cut-off mean score of 2.5 showed that the school environment played a lot of role in enhancing the performance of students in school and aided the teacher to put in more efforts in bringing the best out of the students. The nature of the environment where learning took place brought out the potential of each student in the classroom, and with respect to the Table, a conducive learning environment helped the students learn better just as students who were taught in well equipped and an appropriate environment tended to do better compared to those who were taught in the dilapidated environment. It also helped them maximized their potentials as students and as teachers

Research question two addressed the physical learning environment and how it affected the teacher in the classroom and the students in terms of learning. The sectional mean score of 2.7 on the Table reviewed that a conducive physical learning environment brought out the best in the class teachers as well as created better interactive session between the teachers and the students. The Section showed that the physical learning environment in schools enhanced classroom teachers and students' performance.

Research question three addressed the learning environment and national security in relation to the behaviour of students and teachers. Responses as presented in Table 3 showed that there was a disagreement with items 9 and 10. Based on the items, therefore, it showed that there was no likelihood that students who learnt in a conducive learning environment were likely to be responsible or law-abiding. Also, there was no likelihood that students who attended schools that

were dilapidated and without equipment were going to be violent. There was also an agreement that the school environment was as important as the quality of the teachers and the school curriculum.

Conclusion

This study showed the significant relationship between the physical school environment and academic performance of Basic Education students. When the environment is conducive for learning, learners are more likely to have a higher motivation that leads to better and more positive learning outcomes. The academic performance of the students could be enhanced depending on the structure of their classrooms, availability of the classrooms, instructional facilities, etc. It is believed that a conducive learning environment with available school facilities will gear up the effective teaching and learning processes.

Recommendations

As a result of the findings from the study, the following recommendations were made:

1. The government and other stakeholders in the Education sector should make concerted efforts to provide adequate classroom buildings and renovate the existing dilapidated structures in Basic Education. This will reduce the problem of classroom overcrowding, especially in the COVID-19 Pandemic era. This will also help to create a conducive healthy teaching and learning environment
2. The population of students admitted to public schools should be commensurate with the available classroom space and facilities in the school as this will help the teacher reach out to all the students.
3. The government and education stakeholders should provide adequate classroom furniture like chairs and lockers or desks in public Basic Education to avoid students sitting on the floor while learning.

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