

INFLUENCE OF SCHOOL ENVIRONMENT ON ACADEMIC ACHIEVEMENT OF PRESCHOOL PUPILS IN LAGOS STATE

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Abstract

The study examined the influence of school environment on academic achievement of preschool pupils in some selected public and private preschools in Eti Osa Local Government Area of Lagos State. Four research questions guided the study. Descriptive research design was adopted for the study. The population of the study comprised all the public and private preschool in Eti Osa Local Government Area of Lagos State. The sample of the study was randomly selected among teachers and pupils in both public and private preschools from Eti Osa Local Government Area of Lagos. A random sample size of fifteen (15) preschools was selected using balloting method. Out of the fifteen (15) selected preschools, ten (10) were selected among private preschools and five (5) among public preschools. From the selected schools, a random sampling size of ten (10) teachers each was selected from each of the selected schools. However, a total sample size of one hundred and fifty (150) teachers was used for the study. A researcher-developed instrument duly validated by experts was used for data collection. Mean statistics, simple percentages and standard deviation were used to answer the research questions. The study found among others that there is a serious influence of school physical structure on pupils' learning interest in schooling. Recommendations included among others that preschool education should be encouraged by the government by providing preschool educational facilities (classrooms, instructional materials, and equipment) needed for the success of the programme.

Keywords: school, school environment, academic achievement, pupil, preschool

Introduction

Education which is given in group settings to the age of round about three up to five years old children is called preschool education. It is also called nursery, kindergarten outside the US. Preschool education is designed to investigate and assist the mental, physical, emotional, linguistic, and also social upbringing of children (Justice & Vukelich, 2017). Bibi (2012) referred to preschool as a systematic programme in which young children participate before they enter into primary schools that is designed to promote children's social, emotional, academic, linguistic, and literacy skills, and health and above all wellbeing. According to Wana (2010) and Ernest-Ehibudu and Peter-Kio (2017), preschool is an important developmental period for children as they learn and acquire skills that would eventually aid them in academic achievement in school. It is also a time that marks great variability in the experiences children have, because some children stay at home with their families, others attend private child care programmes, and others attend public preschool. While children's development has been a topic of interest for centuries, children were not viewed as having specific age-defined needs until the late 19th century (Jessica, 2014).

Preschool education is the first step in a child's educational journey. Early childhood experts have the opinion that attending high quality preschool programme helps to promote children's social and emotional development and prepare them for kindergarten and beyond Wana (2010) and (Ikegbusi, 2019). When you walk into a well-designed preschool classroom, you see children and adults working together in a productive surrounding. The children are constructively engaged and teachers busy observing, facilitating, and challenging the children (Adewale, 2012). The environment supports all these by assuming several of the responsibilities one typically associate with teachers. It helps the children interact, learn, and avoid unproductive activities, such as running and getting in each other's ways. Thus, the environment actually becomes another teacher in the classroom.

According to Belo (2018) and Ikegbusi (2019), physical environment plays a central role in any activity and makes it more conducive, successful and achievable. Physical facilities are one of the stimulating factors that play a fundamental role in improving academic achievement in the school system (Ikegbusi, Egwu & Iheanacho, 2021). These include; school buildings, accommodation, classrooms, libraries and information centers, furniture, laboratories, recreational facilities, apparatus, information and communication technology facilities, multipurpose halls and performing art spaces, health,

conveniences, sanitation, maintenance culture, aesthetics and other instructional materials(Ikegbusi, Onwuasoanya & Chigbo-Okeke, 2016) and (Akwara, 2018). Furthermore, their availability, relevancy and sufficiency affect academic achievement positively (Aslam, 2017).

Pupils' academic achievement is influenced by school environment. According to Barrett, Davies, Zhang and Barrett (2015), good classroom arrangement inspires and encourages children to easily interact with each other and develop various skills including language and social behaviour. Poor classroom physical arrangement may affect children's free movement and can result into social behaviour problems. Classroom physical environment plays important role in pupils' educational success. Osagiede(2016) defines physical environment as the physical characteristics of classroom. Physical classroom environment includes different things like size of classroom, floor, walls, desks, lighting, school structure, school climate, computer etc. Hence, the learning environment remains an important area that should be studied and well managed to enhance pupils' academic performance. On the other hand, poor school buildings maintenance, overcrowded classrooms, poor lighting, noise, high levels of carbon dioxide, inconsistent temperatures, ineffective ventilation, lack of proper security system, power supply, water, recreational facilities, lack of health facility, lack of furniture, affect academic achievement negatively. Therefore it is right to say that academic achievement has a close link with the availability of educational facilities (Hussain, 2016) and (Adeyemo & Ejikeme, 2018).

Thomas and Amaechi (2019) described environment as a system within which living organisms interact with the physical elements, while educational environment is a place where the learners learn to interact with learning facilities in order to be socialized and face the challenges in the society. According to Ikegbusi (2019), school environment which includes school climate, instructional facilities, physical structures, spaces for conveniences, planning, accessories for planning, the teachers as well as the preschoolers themselves are essential for teaching and learning to properly take place. The extent to which pupils' learning could be enhanced depends on their location within the school compound, the structure of their classroom, availability of instructional facilities and accessories. It is believed that a well-planned school would gear up expected outcomes of education that would facilitate good social, political and economic emancipation, effective teaching and learning process and academic performance of pupils. Byoung-suk (2012) found the relationship between environment and design within the classroom from a theoretical perspective. They found that physical

environment of the classroom acts as 'silent curriculum' means that classroom environmental design could facilitate and improve the learning process like the overt curriculum. Therefore, paying attention to these elements reduces how much time teachers spend maintaining safety and order. This frees up time for higher levels of teaching, which ultimately increases pupils' learning (Lawrence, 2012).

Olufemi (2018) observed that the leadership style of the school administrators creates a kind of learning environment. A cordial relationship between the head teacher and learners creates an environment conducive to learning as discussions are encouraged and learners are listened to. The head teacher works together with pupils on how to succeed in life and in academic work. In such a school, every member is useful in decision-making process and pupils are usually disciplined and possess positive academic attitudes. The head teacher has a formal relationship with several other people or groups of people both inside and outside the school system. He/she has dealings not only with the teachers and pupils, but also with parents, members of the community, which the school serves and educational officers.

Duruji (2014), Ikegbusi (2019) and Ikegbusi, Egwu and Iheanacho (2021) maintained that the learning environment plays a vital role in determining how students perform or respond to circumstances and situations around them. This implied that no society is void of environmental influences. The learning environment determines to a large extent how a pupil behaves and interacts, that is to say that the environment in which one finds him/herself tends to mold his/her behaviour so as to meet the demands of life whether negatively or positively (Oleribe, 2016). The author opined that the desire for both qualitative and quantitative education has multiplied the problem of providing an effective and conducive learning environment for teaching and learning. In Nigeria, there is an increase in the number of students' enrolment in schools with little or no regards to improving the learning environment so as to better their performance. Ikegbusi, Egwu and Iheanacho (2021) stated that learning environment should have good infrastructural development, adequate trained teachers, good leadership and adequate instructional materials among others. Do all these characteristics have positive impact on academic achievement of pupils in preschools? Therefore, this paper is designed specifically to study the conception of how school environment affects the academic achievement of preschool pupils in Eti Osa Local Government Area of Lagos State.

Statement of the Problem

The researchers have observed with dismay that the environment in the study area is nothing to write home about. The school climate is not interesting for teaching and learning. Instructional materials are inadequately provided, infrastructural facilities are in dilapidated conditions or not available, lack of trained teachers and other facilities that promote teaching and learning are also in short fall which might tend to influence children's academic achievement in school. The researcher observed from some of the preschools in the area that schools employ incompetent teachers that lack proper teacher-pupils' interaction skills and proper management of the school, classroom and facilities. It was on this premise that the researchers were motivated to appraise the influence of school environment on achievement of preschool pupils in fifteen selected primary schools in Eti Osa Local Government Area of Lagos State.

Purpose of the Study

The main purpose of the study is to examine the influence of school environment on academic achievement of preschool pupils in Lagos State, using public and private selected preschools in Eti Osa Local Government Area of Lagos State as a case study. Specifically, the study intended to:

1. Identify the extent school physical structure influence pupils' learning interest in preschools in Eti Osa Local Government Area of Lagos State.
2. Examine the influence teacher-pupil relationship have on pupils' learning behaviour in preschools in Eti Osa Local Government Area of Lagos State.
3. Examine the influence the uses of instructional materials have on the improvement of pupils' academic achievement in preschools in Eti Osa Local Government Area of Lagos State.
4. Examine the influence school climate has on pupils' academic achievement in preschools in Eti Osa Local Government Area of Lagos State.

Research Questions

Specifically, this study sought answers to the following research questions:

1. To what extent does school physical structure influence pupils' learning interest in preschools in Eti Osa Local Government Area of Lagos State?
2. What influence does teacher-pupil relationship have on pupils' learning behaviour in preschools in Eti Osa Local Government Area of Lagos State?
3. What influence does the use of instructional materials have on the improvement of pupils' academic achievement in preschools in Eti Osa Local Government Area of Lagos State?

4. What influence does school climate have on pupils' academic achievement in preschools in Eti Osa Local Government Area of Lagos State?

Methodology

The study adopted a descriptive survey research design. According to Onwe (2014) a survey research design is a study in which a population is studied by collecting and analyzing data from sample considered to be representative of the entire group through the use of questionnaire or interview from the group. The population of the study comprised all the teachers and pupils in selected public and private preschools in Lagos state, particularly all public and private preschool teachers and pupils in Eti Osa Local Government Area of Lagos State. The sample for this study was randomly selected among teachers and pupils in both public and private preschools in Eti Osa Local Government Area of Lagos. A random sample size of fifteen (15) preschools was selected using ballot method. Out of the fifteen (15) selected preschools, ten (10) were selected among private preschools and five (5) among public preschools. From the selected schools, a random sampling size of ten (10) teachers each was selected from each of the selected schools. However, a total sample size of one hundred and fifty (150) teachers was used for this study. The research instrument for this study was a constructed questionnaire. The primary means of data was carried out by constructed questionnaires item, which were duly validated by two experts in the Department of Educational Foundations and one expert in Measurement and Evaluation, all from Chukwuemeka Odumegwu Ojukwu University, Igbariam.

Reliability measure of a research instrument is determined by computing coefficient of correlation between two sets of data collected independently (with the instrument) from the members of the same group (Nwankwo 2016). In doing this, the researcher was assisted by two research assistants who administered 10 copies of the questionnaire to teachers in two preschools in Eti Osa Local Government Area of Lagos State who were not among the selected schools. The split-half method was applied. The reliability coefficient of 0.81 was obtained using Cronbach alpha. The researcher collected data with the help of the three research assistants who were teachers in the sampled schools. These research assistants were briefed on how to distribute copies of the questionnaire. They were briefed on how to go about the questionnaire and to ensure strict adherence to instructions. In each school visited, copies of the questionnaire items were administered on the respondents by the researcher and the research assistants. They waited for the respondents to fill the items. At the end, all the items were filled and

collected, which gave a 100% return rate. Mean statistics, simple percentages and standard deviation were used to answer the research questions.

Presentation and Analysis of Data

Research Question 1: To what extent does school physical structure influence pupils' learning interest in preschools in Eti Osa Local Government Area of Lagos State?

Table 1: Influence of school physical structure on preschool pupils' learning interest in schools

SN	Item	SA	A	D	SD	X	Std. Dev.
1	A conducive learning environment influences pupils' attentiveness in class	113 (75.3%)	35 (23.3%)	0 (0.0%)	2 (1.3%)	3.73	.530
2	Beautifully designed buildings encourages pupils to learn in class	60 (40.0%)	66 (44.0%)	19 (12.7%)	5 (3.3%)	3.21	.788
3	Pupils are ready to learn when they are in spacious and well-arranged classroom	93 (62.0%)	49 (32.7%)	3 (2.0%)	5 (3.3%)	3.53	.702
4	A unique and neat school environment influences pupils interest in school	107 (71.3%)	43 (28.7%)	0 (0.0%)	0 (0.0%)	3.71	.454
5	There are adequate indoor and outdoor facilities in my school for teaching and learning	37 (24.7%)	83 (55.3%)	20 (13.3%)	10 (6.7%)	2.98	.807

Weighted Average = 3.43

N = 150

Values in parentheses are percentages

Table 1 showed that the five items yielded high mean scores ranging from 2.98 to 3.73 out of a maximum score of 4.00 covering conducive environment, beautifully designed building, spacious and well-arranged classroom, unique neat and adequate indoor/outdoor facilities, and the influence of the physical environment on preschool pupils' interest in schooling is quite enormous. The weighted average score of 3.43 also revealed the serious influence of school physical structure on pupils' interest in schooling.

Research Question 2: What influence does teacher-pupil relationship have on pupils' learning behaviour in preschools in Eti Osa Local Government Area of Lagos Stat?

Table 2: Influence of teacher-pupil relationship on pupils' learning behaviour

SN	Item	SA	A	D	SD	Mean	Std. Dev.
1	The teachers' interaction influences their pupils' interest to learning in school	109 (72.7%)	41 (27.3%)	0 (0.0%)	0 (0.0%)	3.73	.447
2	Good relationships between teachers and other staff promotes a conducive environment in the school which fosters learning	94 (62.7%)	48 (32.0%)	1 (0.7%)	7 (4.7%)	3.53	.739
3	Teachers' disposition to their pupils mistakes in class affect the way people respond to learning	58 (38.7%)	84 (56.0%)	1 (0.7%)	7 (4.7%)	3.29	.708
4	Pupils' learning behaviour could be largely determined by the way their teachers relate with them in school generally	67 (44.7%)	72 (48.0%)	3 (2.0%)	8 (5.3%)	3.32	.763
5	Learning behaviour displayed by pupils is as a result of teachers' behaviour when they are being taught	35 (23.3%)	82 (54.7%)	15 (10.0%)	18 (12.0%)	2.89	.899
Weighted Average = 3.35							

N = 150

Values in parentheses are percentages

Table 2 indicated that teachers' interaction ($\bar{x}$ = 3.73), good teacher-other staff relationship ($\bar{x}$ = 3.53), teachers' disposition to pupils ($\bar{x}$ = 3.29), teachers' classroom behaviour ($\bar{x}$ = 2.89) all make important contributions to the learning behaviour of pupils. This is adjudged so based on the mean score which are generally high. On the whole, the high weighted average of 3.35 showed that there is a very strong influence of teacher- pupil relationship on pupils' learning behaviour.

Research Question3: What influence does the use of instructional materials have on the improvement of pupils' academic achievement in preschools in Eti Osa Local Government Area of Lagos State?

Table 3: Influence of teaches' use of instructional materials on pupils' academic achievement

SN	Item	SA	A	D	SD	Mean	Std. Dev.
1	Teachers' competence in instructional materials use influence pupils' academic achievement	99 (66.0%)	48 (32.0%)	2 (1.3%)	1 (0.7%)	3.63	.549
2	Preschool pupils' academic achievement is influence by learning materials available in school	107 (71.3%)	37 (24.7%)	0 (0.0%)	6 (4.0%)	3.63	.689
3	Access to learning and instructional materials is limited in preschool classes within my school	20 (13.3%)	39 (26.0%)	40(26.7%)	51 (34.0%)	2.19	1.052
4	Preschool pupils that are taught using updated instructional materials have higher academic attainment	80 (53.3%)	59 (39.3%)	5 (3.3%)	6 (4.0%)	3.42	.744
5	Instructional materials have direct influence on preschool pupil's performance in school	80 (53.3%)	67 (44.7%)	2 (1.3%)	1 (0.7%)	3.51	.565
Weighted Average = 3.28							

N = 150

Values in parentheses are percentages

Table 3, the place of instructional materials at improving pupils' academic achievement is an important one. The teachers generally agreed that teacher competence is required at using instructional materials effectively ($\bar{x} = 3.63$), availability of learning materials is a basic necessity ($\bar{x} = 3.63$), use of instructional materials associated with higher performance ($\bar{x} = 3.42$) and that there is a direct influence of utilization of instructional materials on pupils' academic performance ($\bar{x} = 3.51$). However, they disagreed with the preposition that access to learning and use of instructional materials are limited in the schools ($\bar{x} = 2.19$). Generally, the weighted average of 3.28 indicated that there is a great influence of teachers' use of instructional material on pupils' academic achievement.

Research Question 4: What influence does school climate have on pupils' academic achievement in preschools in Eti Osa Local Government Area of Lagos State?

Table 4: influence of school climate on pupils' academic achievement

SN	Item	SA	A	D	SD	Mean	Std. Dev.
	1.The environment of trust and mutual respect among teachers, pupils within the school lead to cooperation and inclusive learning	84 (56.0%)	53 (35.3%)	2 (1.3%)	11 (7.3%)	3.40	.843
2	Teachers should be friendly with the pupils in and out of the class to boost self confidence	106 (70.7%)	39 (26.0%)	0 (0.0%)	5 (3.3%)	3.64	.658
3	Teachers' support and encouragement leads to improved pupils' learning and achievement	95 (63.3%)	49 (32.7%)	1 (0.7%)	5 (3.3%)	3.56	.680
4	The location of a school is a determinant of preschoolers' academic achievement	33 (22.0%)	66 (44.0%)	28 (18.7%)	23 (15.3%)	2.73	.976
5	Preschoolers' achieve better in their academics when the school vicinity is very neat and free of disturbance from the neighborhood	98 (65.3%)	44 (29.3%)	3 (2.0%)	5 (3.3%)	3.57	.699
Weighted Average = 3.38							

Values in parentheses are percentagesN = 150

Table 4 showed that the effect of school climate on pupils' academic achievement is very much with the high mean score of 3.40, 3.64, 3.56, 2.73 and 3.57 as well as the weighted average of 3.38. There is no doubt that school climate plays an important role in improving pupils' academic achievement.

Discussion of Findings

The study found that there is a serious influence of school physical structure on pupils' learning interest in preschools. This implied that a good school building structure, location, safety, accommodation, classrooms, libraries, furniture, recreational equipment and technology affect learning and have an influence on pupils' achievement. The setting of a school helps to stimulate and give the child a positive attitude which affects behaviour and results in the eagerness to learn. Children are naturally motivated by what they see. However, inadequate physical

structures and elements could have an adverse influence on teachers and learners. The physical facilities therefore compose a strategic factor in the operation and functioning of an organization as they determine the excellent performance of any social organization or system, including education. This result had also been established by Duruji (2014) whose study showed that physical structure in a learning environment influence pupils and students' academic achievement in such school. Orlu (2013), in his findings suggested that the proper use of colours in schools could convert an atmosphere that is depressing and monotonous into one that is pleasing, exciting and stimulating. The environment should be approachable and inviting the pupils to learn.

Also, there is a very strong influence of teacher-pupil relationship on pupils' learning behaviour in preschools based on the high weighted average of 3.35. Children feel relaxed and free to learn when the teaching and learning is taking place under free and friendly environment rather than hostile environment. Teachers who express concern ,gives constructive guidance and praise, rather than criticism, maintains an atmosphere of trust, open communication line, create learning opportunity for all and are positive role models, have pupils who exhibit improved academic achievement than those pupils with more conflict in their relationship. Wana (2010) stated that a positive teacher-pupil relationship enables pupils to feel safe and secure in their learning environment and provide scaffolding for important social and academic skills' and when teachers and students have a warm and caring relationship, the students show greater levels of school adjustment and achieve higher marks.

The nature of teacher-pupil relationship is very important in aiding pupils' academic motivation and achievement because these pupils are more connected and impacted. Another finding of the study is that there is a great influence of teachers' use of instructional materials on pupils' academic achievement in preschool pupils. The instructional materials made the learning more meaningful and permanent. According to Hussain (2016) stated that instructional materials possess some inherent advantages that make them unique in teaching. For one thing, they provide the teacher with interesting and compelling platforms for conveying information since they motivate to want to learn more. Also, for providing opportunities for private study and reference, the learners' interest and curiosity are increasingly stimulated (Jegede, 2016). Furthermore, the teacher is assisted in overcoming physical difficulties that could have hindered his/her effective presentation of a given topic. They generally make teaching and learning easier and less stressful. They are equally indispensable catalyst of social and

intellectual development of the learners. Ikegbusi (2019) and Ikegbusi, Egwu and Iheanacho (2021) stressed that professionally qualified teachers no matter how well-trained would be unable to put his ideas into practice if the school setting lacks the equipment and materials necessary for him or her to translate his competence into reality. Instructional materials are integral parts of teaching and learning situations. It then showed that, if there must be an effective teaching-learning activity, utilization of instructional material would be necessary. Wana (2010) and Ernest-Ehibudu and Peter-Kio (2017) were of the opinion that the best instrumental materials appropriate and suitable for children of pre-school age are toys and games. There is therefore a general consensus as 71.3% and 28.7% of the respondents strongly agreed and agreed respectively that instructional materials enhance teaching and learning and lead to better students' achievement.

The result of the study showed that school climate plays an important role in improving pupils' academic achievement in preschools' pupils. All members should be welcomed, supported and feel safe in school, socially, emotionally, intellectually and physically. This sense of belonging enables everyone to work in an environment of trust and mutual care. A positive school climate improves academic performance while a negative climate is filled with tension and all sorts of vices like teasing, bullying, victimization etc. as children in this setting find learning difficult. Orlu (2013) and Belo (2018) found that a positive school environment climate is associated with increased job satisfaction for school personnel. Attending a new school can be frightening for pupils and this apprehension can adversely affect pupils' perceptions of their schools climate and learning outcomes. This is in line with Zandvliet and Straker(2017) and Ikegbusi, Egwu and Iheanacho (2021) assertion that positive interpersonal relationships and optimal learning opportunities could increase achievement levels and reduce high-risk behaviour for students in all demographic environments.

Conclusion

In the light of statistical analysis carried out, it was discovered that there is an influence of physical structures on pupils' academic achievement. Well-equipped classrooms with physical facilities have a significant positive influence on the academic achievement of pupils. In a nut shell, it is concluded that if pupils feel comfortable within classroom and well attended to by an experienced professional teachers, they would concentrate better to the lesson they are taught and invariably improve their academic performance and achievement in schools.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Preschool education should be encouraged by the government by providing preschool educational facilities (classrooms, instructional materials, and equipment) needed for the success of the programme.
2. Pupils should be allowed to interact, touch, feel, and see the instructional materials provided since they learn through their senses. They should be provided with adequate and colourful instructional materials to facilitate their learning and allowed to engage in outdoor activities to help in their coordination and social skills.
3. There should be proper enlightenment campaign on the importance of preschool education.
4. Parents should be involved in their children's early education experience by providing the necessary materials.
5. Teachers in preschool programmes should receive intensive supervision and coaching, and they should be involved in a continuous improvement process for teaching and learning.

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