



THE INFLUENCE OF SCHOOL ENVIRONMENT ON ACADEMIC
PERFORMANCE OF PRIMARY SCHOOL PUPILS
IN PORT HARCOURT CITY

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ABSTRACT

This study investigated the influence of school environment on academic performance of primary school pupils in Port Harcourt, Rivers State, Nigeria. A descriptive correlational survey design was used. A sample of 427 primary school pupils was drawn using multi-stage sampling procedure. Two instruments titled School Environment Scale (SES) and Academic Performance Scale (APS) were developed for data collection. SES consists of three sections, A, B and C. Section A consists of information on socio demographic data of respondents. Section B focussed on psychosocial environment items which was responded to on a modified 4-point Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree. Section C contained items on physical environment which was responded to on a modified 4-point Likert scale of Very Good, Good, Poor and Very Poor. The instrument is a validated questionnaire which contained 40 items on psychosocial and physical environment items. The reliability coefficient is 0.83 and 0.73 for School Environment Scale (SES) and Academic Performance Scale (APS) respectively. The data was analyzed using Multiple and Linear regression analysis at 0.05 significant level. It was found out among others that 24.3% of school environment jointly predicts academic performance. More so, 10.1% of psychosocial environment individually predicts academic performance. Finally, 25.5% of physical environment predicts academic performance. It is recommended among others that teachers should cultivate a welcoming attitude that will facilitate bonding between them and the pupils they teach. Again, government should try to provide modern recreational facilities in schools to improve the physical environment.

Keywords: Keywords: School Environment, Psycho-social Environment, Physical Environment and Academic Performance.

1. INTRODUCTION

Some persons see learning as boring and cumbersome; some others see it as an obligation that must be fulfilled but a motivating school environment can make learning interesting and pleasurable. Berry (2002) stated that schools are special environments that exist for the purpose of enhancing the learning process. They are sensitively-built environments housing very special segments of the population. Learning can occur only in orderly classroom. 'Orderly' however, does not imply quiet or rigid. The classroom whose hum and flow indicates youngsters engaged in meaningful activity can be more orderly than the classroom in which you can hear a clock tick. An orderly environment is one in which everyone (teacher and students) knows exactly what to do (Elliot, Kratochwill, Cook and Travers, 2000). In 1837 Friedrich Froebel (1782- 1852) opened a school for children under age six called the kindergarten, a German word meaning children's garden. After trying a number of occupations and teaching at several levels, Froebel concluded that the early years of life, those on which the foundation for later years are built, are the most critical (Froebel, cited in Seefeldt and Barbour, 1994).

2. LITERATURE REVIEW

The nurturant qualities of the environment where children grow up, live and learn matter the most for their development (Siddiqi, Irwin and Hertzman, 2007). The environment and experiences that influence early childhood include: The individual, family and dwelling, residential and relational communities (The family environment, the school environment, and the church environment in both urban and rural settlements), programs and services, regional, national and global environments and civil society matter (Hertzman, 2010; Ndani & Kimani 2010).

According to Locke's theory, all children are created (born) equal, and the mind of a newborn infant is like a piece of white paper- a tabula rasa (blank slate). All knowledge comes to the child through experience and learning. Children are therefore neither innately good nor innately evil; they are simply the products of their environment and upbringing (Vasta, Miller & Ellis, 2004). This environmentalist point of view also means that any child theoretically is capable of becoming anything- a surgeon, an actor, a skilled artisan- if given the proper rearing and training. Similarly, the wrong environment can produce a scoundrel (Vasta, Miller & Ellis, 2004).

According to Adeyemo (2012), research consistently shows that educational environment has the greatest potential to influence children's education. For some time now, psychologists and educationists have been arguing on the factors that affect academic performance of learners in the subjects offered. While some stress that school buildings are of critical importance to the teaching and learning process some argued on the relationship between physical characteristics of school buildings and some educational outcomes.

Children by nature are playful and are fascinated when they see colourful paintings and toys. Most times they learn by playing. Matar and Brighith (2010) investigated the impact of school design on academic achievement in the Palestinian territories and asserted that pupils' drawings of their school could be an indicator of how attractive they find the school environment. On the other hand, they are possibly a reflection of the school building's capacity to stimulate creativity. Surapuramath (2010) studied the relationship between school climates with academic achievement of students in Mathematics. He stated that school environment is a powerful force and plays a pivotal role in the all-round development of the child.

Nazir and Mattoo (2012) stated that school is the primary setting where individuals first encounter the world at work. Schools are vital forces in children's development affecting their motivation to learn the modes of remembering, reasoning, problem solving, social and moral understanding. The most important factor in the school is the atmosphere existing there (Nazir and Mattoo 2012). Interactions among the teachers and between the principal of the school weave an intricate and delicate web of the school climate (Surapuramath 2010). Studies have shown that school climate affect academic achievement/performance positively in higher institutions of learning and among adolescents. Directly linked to schooling itself are morale, material and human

resources made available to the school where a conducive climate with the right mix of conditions are manipulated in a classroom to produce desirable outcomes (Kunje, Meke and Ogawa, 2009).

Environment to the layman means the physical space occupied by man on earth which essentially is the physical environment, which includes the geography of the earth among others. According to Chambers 21st Century dictionary, environment is the condition or surrounding within which something or someone exists. Young children experience their world as an environment of relationships, and these relationships affect virtually all aspects of their development – intellectual, social, emotional, physical, behavioural, and moral. Stated simply, relationships are the active ingredients of the environment's influence on healthy human development (www.Developingchild.net, 2004). In fact, scientists have discovered that early experiences can determine how genes are turned on and off and even whether some are expressed at all (National Scientific Council on the Developing Child, 2010). The experiences children have early in life and the environment in which they have them shape their developing brain architecture and strongly affect whether they grow up to be healthy, productive members of society (Eriega, 2006).

According to Mick (2011), school environment means the extent to which school settings promote safety and student health, which may include topics such as the physical plant, the academic environment, available physical and mental health supports and services, and the fairness and adequacy of disciplinary procedures as supported by relevant research and assessment of validity. School environment includes the physical and aesthetic surroundings and the psychological climate and culture of the school (State of Maine as cited in Odeh, Oguche, and Ivagher, 2015). School environment in the context of this study includes; physical and psychosocial environment of the school, classroom/classroom settings, teachers, availability and use of instructional materials and other caregivers. This entire construct put together, brings about an effective learning environment which should enhance academic performance (Berry, 2002).

Psychosocial environment is defined as the environment that encompasses the overall emotional climate or 'feeling tone' that exists in every classroom, a mixture of pleasure, distress, intrigue, boredom, happiness, sadness, excitement, love, fear- all human emotions seem to be included (Charles & Senter, 2008). It also refers to the interpersonal relationships in the school, the social environment and how the students and the staff interact with each other. The psychosocial environment is also about the students' experience of the learning situation.¹

Physical environment is not defined only by the objects in the environment or the physical characteristics of the environment but the physical environment is also defined by the relationship between the physical environment and its inhabitants (Inan 2009).

In relation to educational research, academic performance of a student can be regarded as the observable and measurable behaviour of a student in a particular situation. Therefore, we can equate academic performance with the observed behaviour or expectation of achieving a specific statement of or statement of educational intention in a research (Yusuf, ND). Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments (Steinmayr, Meibner, Weidinger, and Wirthwein, 2014). According to Sabitu, Babatunde & Oluwole (2012), academic performance is one of the parameters used to measure the effectiveness of a school (environment) system. Academic performance in the context of this study refers to the average performance of a pupils in class work, assignment, test and examination.

Arul Lawrence and Vimala (2012) carried out a research on school environment and academic achievement of standard ix students. Sabitu, Babatunde and Oluwole (2012), carried out a study on school types, facilities and academic performance of students in senior secondary schools in Ondo State. Related studies have investigated the effect of school environment on academic performance of students. However, no researcher has delved into the influence of school environment on academic performance of primary school pupils with proposed variables of interest in Port Harcourt Rivers State, Nigeria. Based on the foregoing, the researchers sought to find out the influence of school environment on academic performance of primary school pupils.

¹ See: www.2.ssb.be>teachers>Public.Plans, accessed 28/1/2017

The central goal of this study is to investigate and document the influence of school environment on academic performance of primary school pupils in Port Harcourt Rivers State, Nigeria. In specific terms, the objectives of the study are to:

- investigate the influence of psychosocial school environment on academic performance of primary school pupils
- examine the influence of physical school environment on academic performance primary school pupils.

The study provided answers to the following research questions:

- To what extent does psychosocial school environment influence academic performance of primary school pupils?
- To what extent does physical school environment influence academic performance of primary school pupils?

The following hypotheses were tested at 0.05 level of significance:

- There is no significant influence of psychosocial school environment on academic performance of primary school pupils.
- There is no significant influence of physical school environment on academic performance of primary school pupils.

3. MATERIALS AND METHODS

The research design for the study is descriptive correlational survey, that investigated the influence of school environment on academic performance of primary school pupils in Port Harcourt, Rivers State, Nigeria. Multi-stage sampling procedure was used for the study. At the first stage; primary schools were stratified into two groups; private and public schools. At the second stage; simple random sampling technique (balloting without replacement) was used to randomly draw 10% of the schools that are operational in Port Harcourt Rivers State, Nigeria. At the third and final stage; total sampling for all primary five pupils was done. A sample size of 427 pupils from 10 schools was used for the study. All primary five pupils from the 10 schools constituted the respondents for the study. The instrument for the study is a non-cognitive and non-standardized questionnaire titled 'School Environment Scale' (SES) and 'Academic Performance Scale' (APS). The items of the instrument were responded to on a modified 4-point rating scale. The Cronbach alpha reliability was computed to determine the measures of internal consistency of the scales. The coefficient of 0.83 was obtained for the School Environment Scale and 0.73 for Academic Performance Scale. The research questions were answered with multiple and linear regression while the null hypotheses were tested at 0.05 level of significance.

4. RESULTS AND DISCUSSION

4.1 Empirical Results

In analysing the data to provide answers to 'Research question one', and the tests for hypothesis 1 *inter alia*; H_{01} : *There is no significant influence of psychosocial school environment on academic performance of primary school pupils*. We used regression analysis. Hence, linear regression was used to explore the relationship between psychosocial school environment and academic performance. The findings revealed that significantly 10.1% of psychosocial school environment influences academic performance ($R=0.318$, $R^2=0.101$, $F=19.515$, $p<0.05$). The associated ANOVA computed is given as $F(1,359)=19.515$, $p<0.05$. The null hypothesis which states that there is no significant influence of psychosocial school environment on academic performance of primary school pupils is therefore rejected. The conclusion is reached that psychosocial school environment influences academic performance of primary school pupils.

By the same token, we used the regression analytical model to test the data to determine the nature and validity of 'Research question two' in addition to the testing of 'hypothesis two'

which reads: H_{02} : *There is no significant influence of physical school environment on academic performance of primary school pupils.*

The results of the linear regression show that, significantly, 25.5% of physical environment predicts academic performance ($R=0.505$, $R^2=0.255$). The associated ANOVA computed is given as $F(1,359) = 59.190$, $p < 0.05$. The null hypothesis which states that there is no significant influence of physical school environment on academic performance of primary school pupils is therefore rejected. The conclusion is reached that physical school environment influences academic performance of primary school pupils.

4.2 Discussion

(a) *The relationship between psychosocial school environment and academic performance*

There is a significant relationship between psychosocial environment and academic performance. The findings revealed that significantly 10.1% of psychosocial school environment predicts academic performance ($R=0.318$, $R^2=0.101$, $F=19.515$, $p < 0.05$). The null hypothesis which says there is no significant influence of psychosocial school environment on academic performance of primary school pupils is therefore rejected. This result is in disagreement with the findings of Arul Lawrence and Vimala (2012) that there is no significant relationship between school environment and academic achievement of standard IX students. This discrepancy may be because the researchers in the present study worked with younger school pupils. The finding of the study is in agreement with the findings of Dorman (2009), where there were statistically significant associations between psychosocial school environment and students' grade. Again, it also agrees with the findings of Zandvliet & Straker (2001) which indicated that students view their psychosocial learning environments positively and that these environments were characterized by relatively high level of student cohesiveness, involvement, task orientation, co-operation and satisfaction. There was a weak, positive correlation between psychosocial school environment and academic performance ($r = .318$, $p < 0.05$), with high positive psychosocial school environment associated with high level of academic performance.

(b) *Relationship between physical school environment and academic performance*

The findings revealed that significantly 25.5% of physical school environment predicts academic performance ($R=0.505$, $R^2=0.255$, $F=59.190$, $p < 0.05$). The null hypothesis which says there is no significant influence of physical school environment on academic performance of primary school pupils is therefore rejected. The findings of the study indicated a significant relationship between the school environment and academic performance. The findings of this study support the findings of Torupere (2016) in Bayelsa where it revealed that aesthetic beauty of the school and infrastructural facilities significantly influenced secondary school students' academic performance. Similarly, the finding of this study is in keeping with the findings of Odeh, Oguiche, & Ivagher (2015), where there was a significant of physical facilities on academic achievement of secondary school students in Zone 'A' Senatorial District of Benue State. Moreover, the findings of this study is consistent with Inan (2009) who reported that physical environment plays an important role in the lives of preschoolers with special needs. The findings of the study indicated a strong, positive correlation between physical school environment and academic performance ($r = .506$, $p < 0.05$), with high positive physical environment associated with high academic performance.

5. CONCLUSION

We were able to concluded that 45% of the variables investigated in the present study predict academic performance of primary school pupils in Port Harcourt Rivers State, Nigeria. This implies that 55% of other variables not studied could predict performance. The quality of learning

environment that a child experiences will influence the child's learning attitudes in primary and beyond. This would influence academic performance either negatively or positively. In view of the findings of this study, the following recommendations were made:

- The school management should ensure that the school is safe and offers positive experience for all pupils.
- Teachers are encouraged to cultivate a welcoming attitude that will facilitate bonding between them and the pupils they teach.
- Teachers are enjoined to be responsive to the social needs of their pupils. They should strive to provide social support for each pupil.
- The government should try to provide modern recreational facilities in schools to improve the physical environment.

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