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RESEARCH ARTICLE

Influence of School Environment on Academic Performance of Secondary School Students in Calabar Metropolis, Cross River State, Nigeria

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Abstract
The study focused on examining the influence of school environment on the academic performance of secondary school students in Calabar. The study specifically sought to analyse the extent to which location and physical facilities determines academic performance of students. Data for the study were obtained through field surveys including questionnaire administration. A total of 200 copies of questionnaire were distributed in the sampled schools. However, students were the target population of the study. The variables that were used in measuring location were noise, ventilation and travelling distance from home to schools. Variables for physical facilities were libraries, science laboratories, adequacy of classrooms and ICT/computer laboratories. It was observed in the study that majority of the schools were located in considerably far distances and the environs where schools are located are susceptible to noise and pollution. It was also noted that majority of the students were undertaking studies in poorly ventilated classrooms. Furthermore, the study observed that physical facilities such as libraries and laboratories were poorly equipped, classrooms were inadequate and ICT/computer laboratories were not properly equipped. All of these pose threats to the academic performance of students. For instance, it was observed that majority of the students perform low academically. Holistically, it is difficult for student to attain academic goals as well as perform academically well in school environments that are unconducive and lack the necessary physical facilities. Based on the study findings, it was concluded that schools be located in places that are not prone to atmospheric and noise pollution. Equally, there is need to ensure that schools structures are designed in such a way that ventilation will be adequate was stressed. Finally, facilities such as libraries, science and computer laboratories should be equipped appropriately.

Keywords: Laboratories; libraries; location; physical facilities; traveling distance

Introduction

Education is a veritable tool for national development. It is regarded as the bedrock of the nation and plays it an indispensable role in national integration. Due to its importance, the National Policy spelt out that education is an instrument for social change, development and sustainability. Therefore, for a nation to be revolutionized, the education of its people has to be given priority since education paves way for civilization and provides a sense of belonging to learners in the society. From the forgoing, it is clear that everyone deserve to be educated thus, access to good quality education is a fundamental human right (Emmet and Eur, 2011).

With the assertion that education is a fundamental right, it is important to ensure that the school environment is regulated in such a way that it will promote academic performance and achievement by learners. This is because the academic performance of students in the school is largely tied to school environmental factors and teaching styles (Chetty, Handayani, Sahabudin, Ali, Hamzah, Rahman and Kasim, 2019), student personnel management, the quality/quantity of teachers (Nwogu and Esobhawan, 2014; Maphoso and Mahlo, 2015; Aliyu and Ali, 2021) as well as the school environment (Chukwuemeka, 2013; Nsa, Offiong, Udo and Ikot, 2014). Basically, school environment provides the opportunity for training, the needed resources and the necessary assistance in the establishment and management of the educational system. Therefore, the school environment determines the physical, structural, personal, and functional factors of the educational institution, which provide distinctiveness to schools. In other words, the school environment determines the level of academic performance of students (Chukwuemeka, 2013; Amaechina and Ezeh, 2019). School environmental factors can therefore affect students' performance positively or negatively. For instance, schools that are located in districts with high level of noise pollution, unhealthy sanitation practices as well as lack of basic facilities such as laboratories, poorly equipped libraries and inadequate classrooms, such students are vulnerable to poor academic performance. Lee and Sulaiman (2018) noted that favourable school environment with the availability of the needed facilities and environmental conditions influence learning outcome and

promote academic performance. This is due to the fact that the school environmental factors play inevitable roles in the academic performance of students.

Globally, available studies have pointed to the fact that the school environment determines the level of academic performance of students. For instance, Lee and Sulaiman (2018) observed that in Malaysia, there is a difference in the academic performance of students in schools with favourable and unfavourable environment. Schools with necessary and required facilities and in noiseless locations which were rgarded as being favourable allowed students to explore and gain knowledge thereby performing better academically than students that lack the necessary facilities. Ngbambi (2014) posited that in Tanzania, school and environmental factors contributes maximally in promoting academic performance of student. He observed that poor academic performance of students is due to poor working environment for teachers, poor supply of teaching and learning materials high teacher-students ratio and poor teaching pedagogy. Equally, inadequate facilities which all make the school environment unfavorable affect student performance. Khan, Begum and Imad (2019) further identified a positive relationship between environment and student academic performance at the secondary school level. He revealed that, the school environment is a significant factor that influence students' academic performance.

Ngbambi (2014) established that the school environment may have negative influence on students' academic achievement especially if such environment lacks good school climate, instructional materials, discipline, physical facilities, poor teacher quality, the location of school, it vulnerability to noise pollution and security. In Nigeria, existing studies have affirmed that school environment is unconducive for learning. For instance, students do not have access to various facilities and materials and the schools are not located in good environments which are expected to enhance their understanding. The result is poor academic performance in schools. Nsa et al., (2014) noted a positive relationship between availability of laboratory facilities and students' academic performance. They also showed that the availability of facilities in schools drastically promote academic performance of students.

From the foregoing, it is obvious that school environment in terms of the location and facilities that are available influence academic performance positively or negatively. Therefore, for secondary school students to perform maximally well and attain academic goals, there is need to monitor strictly the school environment. However, the performance of students in relation to the school environment has not been given adequate attention in available studies in Calabar and Cross River State. This imply that there is a gap in knowledge that needs to be filled. In order to bridge the gap in knowledge, the study sets out to examine the influence of school environment on academic performance of students in secondary schools in Calabar Metropolis, Nigeria.

Literature review

There is a growing concern among scholars that school environment determines teaching and learning in schools. Nsa et al., (2012); Nsa et al., (2014) believed that the availability of science and computer laboratories, library facilities, adequate classroom facilities, workshop facilities, playgrounds, etc aid teaching and learning. Ramli, Zain, Zain, and Rahman (2021) analysed school environmental factors and how there influence academic performance. They used questionnaire as the instrument for data collection and employed regression and correlation methods in carrying out analysis. Their results indicated that environmental factors have significant impact on academic performance of students. They further noted that environmental factors affect students' quality of life. In order for academic performance of students to be improved. They suggested that school environmental factors be addressed and upgraded.

In a related study, Nghambi (2014) in Tanzania noted that school environmental factors play inevitable roles in determining student academic performance in Secondary Schools. Using questionnaires, interview and field observations Ngbambi showed that poor performance in examinations was associated with poor working environment for teachers, poor supply of teaching and learning materials, high teacher-students ratio, and poor teaching methodology. Specifically, he noted that inadequate teaching and learning materials, high teacher-student ratio and poor working environment have a significant impact on student achievement. From his findings, it was noted that school environmental factors influence academic performance of students especially at the secondary school level. He concluded that a conducive working environment for teachers, adequate supply of teaching and learning materials, provision of motivation to teachers, proper recruitment and in-service training for teachers, a good education policy, teachers being responsible and accountable, use of proper teaching and learning methods, as well as community participation in school activities and good child care will make the school environment conducive and favourable for students.

Nsa et al. (2014) assessed the relationship between school environmental variables and students' academic performance in agricultural science. They employed correlational survey design and selected students randomly. Their target population consisted of students. They further used copies of questionnaire and checklist. Furthermore, they analysed data using pearson product moment correlation. Their study showed a significant relationship between availability of laboratory facilities and students' performance in agricultural science. They also identified a significant relationship between availability of farming facilities and academic performance of students. Based on their findings, they recommended the creation of a more conducive environment that will aid students' perform better academically.

Akpan (2020) examined the influence of school environment on the academic performance of Biology students in secondary schools in Ukanafun Local Government Area of Akwa Ibom State. He used variables such as class size, instructional facilities, peer relationship and school location as well as students' academic performance in Biology. His findings revealed that there was significant influence of the variables related to school academic environment on the academic performance of students in Biology. Based on their findings, they recommended that schools should endeavour to create a conducive environment so as to promote students' academic performance and both government and private school administrators need to monitor the school environment in order to ensure improved academic performance. Similar findings were made by Harinarayanan and Pazhanivelu, (2018). From the submission of the scholars it is clear that the school environment influences academic performance of the students. However, the studies presented above have not given concern to the study area which implies that there is a gap in knowledge. Based on this observation, this study is necessary.

Methodology

The study area is Calabar metropolis. It is situated between Longitudes 8 º18` East and 8º26` East of the Greenwich meridian and Latitudes 4º50' North and 5º67' North of the Equator. The entire study area is made up of 159.65square kilometres (Eteng and Ajom, 2021). Calabar metropolis is bounded to the North by Odukpani Local Government Area and to the West by the Calabar River. In the East, it share boundaries with the Great Kwa River and the Atlantic Ocean to the West. The population of the study area has been growing steadily over the years. The 1991 population census results put the number of humans at 328876 (NPC, 1991). By the end of 2021, the population was estimated at 687351 persons (Ajom and Eteng, 2021). There are several secondary schools in Calabar metropolis. The secondary schools publicly are and privately owned. However, private schools dominate in the study area.

In order to obtain data, the survey design was adopted in this study. In the study, 20 secondary schools were randomly selected comprising of 10 private and 10 public schools. The schools were selected such that both Calabar South and Calabar Municipality were covered through ensuring that 5 private schools and 5 public schools were randomly chosen in Calabar Municipality and same process was replicated in Calabar South. In all, a total of 20 secondary schools were selected and used as the sample. In each of the sampled schools, 10 copies of questionnaire were randomly distributed to students. Specifically, students were the target population for the study. Therefore, 200 students were sampled out for questionnaire administration comprising of 20 students from each selected schools. Data were further analysed using simple percentages and descriptive statistics.

Findings and Discussions

Location

The variables that were used in assessing the location of secondary schools in Calabar metropolis were the mean travelling distance from home of students to schools, the level of noise generated within the school environment by adjoining neighbourhoods and extent of ventilation. As noted in Table 1, majority of the students (29 percent and 31 percent) travel between 901metres and above 1.2kilometres on daily basis to school. This suggest that the schools are located in considerably far distance. The implication of travelling long distances is that students spend energy and time on moving from homes to schools especially those that cannot afford transportation fares. Even for those demand the services of commercial cars, they are subjected to delays due to traffic hold-ups given the fact that school activities mostly kick-start within the traffic peak periods.

The Table further revealed that most students (53.5 percent) are subjected to study within environments that are prone to noise pollution. Such noises are generated from incompatible land uses and activities which do not complement the siting of schools within such environs. The students therefore become distracted easily and loose focus when teaching and learning is ongoing. Equally, it was revealed in the Table that student are packed up in classrooms that are not well ventilated. The implication is that they lack the needed comfort to help them focus on their studies while teaching and learning is ongoing in classes. Even more, schools lack fans and air conditioners to provide ventilation. Obviously, being stocked up in areas that are not well ventilated put the health and wellbeing of students in danger. From the observations in the table, it is clear that students in secondary schools are not studying in good environments that will boost their academic performance. This imply that a lot needs to be done in order to promote the academic performance of students in schools.

Table 1. Location

Variables	Categories	Frequency	Percentage
Travelling Distance	0-300m	19	9.5
	301-600m	39	19.5
	601-900m	22	11
	901-1.2km	58	29
	Above 1.2km	62	31
	Total	**200**	**100**
Noise	Very noisy	107	53.5
	Noiseless	93	46.5

	Total	**200**	**100**
Ventilation	Well ventilated	98	49
	Poorly ventilated	102	51
	Total	**200**	**100**

Source: Field Survey, 2022

Physical Facilities

The physical facilities that make up school environment were identified to include availability of libraries, science laboratories, adequate classrooms and ICT/computer laboratories. Table 2 noted that majority (61.5 percent) students study in poorly equipped libraries their schools as against 38.5 percent that have well equipped libraries. The domination of students that study in poorly equipped libraries imply that academic performance of students is low. In the Table, it was also noted that most students lack access to good/equipped science laboratories while classrooms of majority (65.5 percent) are inadequate. The table finally showed that most students do not have access to ICT/computer laboratories.

Table 2. Physical Facilities

Variables	Categories	Frequency	Percentage
Libraries	Well Equipped	77	38.5
	Poorly Equipped	123	61.5
	Total	**200**	**100**
Science Laboratories	Well Equipped	121	60.5
	Poorly Equipped	61	30.5
	Not Available	18	9
	Total	**200**	**100**
Adequate Classrooms	Adequate	69	34.5
	Inadequate	131	65.5
	Total	**200**	**100**
ICT/Computer Laboratories	Available	48	24
	Not available	69	34.5
	Available but not equipped	83	45.5
	Total	200	100

Source: Field Survey, 2022

Academic Performance

In Table 3, the academic performance of students was examined.

Table 3. Academic Performance

Academic Performance	Frequency	Percentage
Upper	35	17.5
Middle	74	37
Lower	91	45.5
Total	200	100

Source: Field Survey, 2022

The Table revealed that most of the students in the study area perform lower in academics. Clearly, the low level of performance in academics can be largely tied to the school environment in terms of location and physical facilities that are available in the school. This is because students are likely to perform lower academically when the needed facilities that can boost their performances are lacking.

Recommendations

Based on the findings of the study, the following recommendations were made;
Schools should be located in places that are not prone to atmospheric and noise pollution. To achieve this, appropriate site selection criteria and experts should be engaged in the process of choosing sites for secondary schools in the study area

i. There is need to ensure that structures that are to be used as learning facilities should be designed in such a way that ventilation will be adequate given the fact that students perform better academically when they study in well ventilated environments. Most importantly, cross ventilation should be ensured in the buildings accommodating schools.
ii. Schools should also be located within close proximity to homes. This will help in reducing the time, energy and resources spent on travelling by students from home to schools
iii. Facilities such as libraries, science and computer laboratories should be equipped appropriately. This will help student perform better academically as the facilities will aid them to study.

Conclusion

The study focused on assessing the influence that exist between school environmental factors and academic performance of students in secondary schools in Calabar Cross River State, Nigeria. The paper used variables such as location of schools and physical facilities that are available in the school. The study observed that location as a variable of school environment affect the academic performance negatively in the study area. For instance, most school were observed to be located in areas that are prone to noise, poorly ventilated and in long travel distances from homes to schools of students. The absence of sufficient facilities in secondary schools were also observed as variables that affect student academic

performance negatively in the study area. Having in mind that secondary schools play important and indispensable roles in the preparation of students for nation building, it was suggested that appropriate approaches be adopted in the selection of sites for the location of schools. Equally, facilities that are capable of providing aid for better understanding in classrooms by secondary school students should be provided.

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