

Impact of Learning Environment on Students' Academic Performance in Secondary Schools in Enugu North Local Government Area of Enugu State, Nigeria

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Abstract: This study investigated the impact of learning environment on students' academic performance in secondary schools in Enugu North Local Government Area of Enugu State, Nigeria. Three research questions and three null hypotheses guided the study. The study employed descriptive survey research design. The sample size for the study comprised one hundred and twenty (120) SS 2 students from 9 public secondary schools in the study area (60 urban, 60 rural). The Instrument for data collection was the researcher developed questionnaire titled: Learning Environment and Academic Performance Questionnaire (LEAPQ). The LEAPQ was validated by the supervisor and experts from Enugu State College of Education (Technical), Enugu. Also, the overall reliability co-efficient of 0.85 was obtained for the IDAPQ using Cronbach Alpha. Mean and standard deviation were used to answer the research questions while independent samples t-test statistic was used to test the hypotheses at 0.05 level of significance. Findings of the study indicated that: the academic performance of students in both the urban and rural secondary schools in Enugu North LGA is influenced by school physical facilities, school library and school laboratory facilities. The findings also revealed that there is no significant difference in the mean responses of students in Enugu North LGA on the influence of school physical facilities, school library and school laboratory facilities on their academic performance. The study recommended among others, that educational administrators should ensure that classroom physical environments are conducive for learning to enhance students' academic performance.

Key Words: Academic Performance, Environment, Impact, School Location, Teaching and Learning, Secondary School.

Introduction

Education is very important in any given society. It is the actualizing of human potential so that the individual can become something more than what he was before. Vithalrao (2012) sees education as a process by which society deliberately transmits its accumulated knowledge, values, and skills from one generation to another through institutions or otherwise. Educational institutions may be run or operated by government, non-governmental organizations (NGOS) or private business enterprise. Whether public or private, educational institutions should operate in an environment that is conducive for learning.

Environment can be defined as a system within which living organisms interact with the physical element. Adeola (2015) sees environments as consisting of all elements existing around man and which exert some influence on him. Environment can also be seen as aggregate of all the external condition and influence affecting the life and development of an organism. Education

environment is a learning place where the learner learns and interacts with learning facilities in order to be socialized and face the challenges in the society. In this study, environment includes all the external conditions and influences in the school that affect the academic performance of the student such as laboratory equipment, library facilities, qualified teachers, furniture, school building, good administrative management, teacher-students relationship and school location among others.

School environment is the thread that connects the multitude of activities in the school. In many respects, this thread is almost invisible, yet everyone experiences its influence. The environmental variable of a setting could help to a large extent in ensuring attainability of the goals of such setting. The environmental differences and the differences in the quality of instruction from one school to another can create differences in the level of knowledge acquisition of the students. This shows that the learning facilities children are exposed to can affect their academic performance.

Learning/school environment can be seen as the material and human resources, and a learning place which consist of the entire interaction. The learning environment is both the natural and provided setting where teaching and learning takes place. Maduewesi (2019) refers to learning environment as classroom surroundings, physical facilities in the classroom and teacher – pupil relationship. Environment is a very important factor in achievement of goal of any educational programme. People acquire most of their knowledge through the interaction with facilities provided in the environment for learning. Also learning is influenced by the environment people are exposed to and the facilities provided in such environment lead to experience. Nwosu (2017) stated that active interaction with the environment is regarded as the most basic requirement for proper intellectual development. The physical appearance and general condition of school physical facilities are the striking basis upon which many parents and friends of any educational institution make initial judgment about the quality of what goes on in the school. They are often turned off by dilapidated school blocks with sinking roofs and broken walls, bushy lawn and overgrown hedges. Also are profane writings on walls, littered lawns and pathways. Finally, the school physical environment is like a mirror reflecting the image of a school and through it the public decides whether or not to associate with the particular school (Mgbodile 2014). School facilities as part of learning environment showcase the image of any school. This study examined whether school location has any part to play as regards the impact of school environment on students' academic performance.

In Nigeria today in general and Enugu North Local Government Area in particular, schools are closely associated with the communities. Many communities depend on the neighbourhood school for the provision of good and appropriate environment for accommodation, furniture and all forms of equipment for certain activities like club or village meetings, wedding reception and church services. There is need for a well planned and organized educational environmental enrichment because it fosters good interpersonal relationship. Ayodele (2015) and Ajayi (2017) have shown that school resources aid students' academic performance. It is now certain that most of secondary school products cannot gain admission into federal universities or university of their choice due to poor performance in the placement examination into these schools. This study focused on three variables of learning environment, namely school physical facilities, school libraries and laboratories.

School physical facilities are the tangible structures which serve as shelter for educational activities. They include among others, classroom blocks, workshops, teachers' staff rooms/offices, dormitories, and dining hall. Despite the evidence that the quality of a school building affects students' academic performance, many public schools, in Enugu State are in poor physical condition. It is in line with this that Earthman (2014) opined that the buildings in which students spend good deal of learning does influence how well they learn. Mgbodile (2014) has pointed out that for effective teaching and learning situation, school building and educational goals, should be viewed as being interwoven. Apart from protecting the pupils from the sun, rain, heat and cold, school building represent learning environment which has great impact on the comfort, safety and performance of the children.

On the other hand, the school library is a room or building in a school where books, magazines, journals, periodicals, cassettes, computers among others are kept for student's use. In other words, it is the central laboratory of the whole school, where all books in all subject areas, taught in the school and non-book materials are stocked. The objective of the school library is to serve the school's need and to make possible the purpose and methods of education which the school undertakes. The school

library enables the students to look to new ways of learning, and with its resources can play a vital role in enhancing students' academic performance.

Similarly, school laboratory activities have had a distinctive and central role in the science curriculum and science educators have suggested that many benefits mount up from engaging students in science laboratory activities. Over the years, many have argued that science cannot be meaningful to students without worthwhile practical experiences in laboratory. Unfortunately the term laboratory or practical have been used too often without precise definition, to embrace a wide array of activities. Lots of arguments have been raised in the past to give justification or rationale for its use. Some laboratory activities have been designed and conducted to engage students individually, while others have sought to engage students in small groups and in large-group demonstration setting. The place of laboratory practical in teaching cannot be over emphasized. Little wonder why Omeodu (2018) opined that practical work increases knowledge acquisition of the learners, develops skills and competencies required to meet scientific and technological demands of the nation, makes scientific phenomena more real and during practices, social interaction is enhanced. Therefore, there is no adequate substitute for retention of facts and which also makes learning more permanent because, practical work closely linked with theoretical work help to maximize opportunity to practice those scientific methods. It is, therefore, very appalling that some of the public secondary schools in Enugu North Local Government Area lack good laboratory for science learning in order to facilitate high academic performance.

Academic performance can be said to be performance attained in schools through assignments, test and examination. Academic performance, which is measured by the examination results, is one of the major goals of a school. It is the ability to study and remember facts, ability to study effectively and see how facts fit together and form larger patterns of knowledge, ability to think for yourself in relation to facts and ability to communicate your knowledge verbally or in writing. Osharive (2015) defines academic performance as the outcome of education, the extent to which a student, teacher or institution has achieved their educational goals. It is the outcomes of the teaching and learning process in terms of knowledge and skills in students acquired from schools and measured by scores obtained in examinations. Academic performance of students is typically assessed by the use of teacher's ratings, tests, and examinations. Academic performance could be influenced by learning environment such as school physical facilities, school libraries and laboratory facilities. School learning environments may differ according to school location.

Location as an intervening variable in this study refers to the physical environment where schools are situated which are divided into rural and urban. Olawale (2016) explains that a school situated in an urban area is much likely to have all the characteristics of that same area such as electricity and internet services while that of rural areas will equally have the characteristics of its environment. The situations related to locations are not unrelated to the type of learning environment to be found in that school. The location of the schools, which is either urban or rural may determine to a large extent the learning environment which could influence students' academic performance. Mayowa (2018) noted that different aspects of school environment (rural and urban) influences students performance. Therefore, the location of schools could have tremendous influence on students' academic performance. The researchers therefore, intend to investigate the variables in the learning environment with a view of assessing their relative impact on students' academic performance in senior secondary schools in Enugu North Local Government Area of Enugu State.

Statement of the problem

The importance of good learning environment to the success of education cannot be overemphasized. There is an outcry about the unsatisfactory condition of the educational system being operated in Nigeria as caused by poor learning environment. The establishment of government schools/community schools has resulted in a situation where some schools were favoured in terms of the provision of rich learning environment than others. It has been very difficult if not impossible for government to standardize the school environment. Thus the environment varies from school to school. Some schools have adequate school buildings, good library and suitable textbooks, good administrative management, professionally qualified teachers, good

laboratory equipment as well as good location, while in some schools little or none of these exist. It has been agreed that poor teaching experience, inadequate or poor physical infrastructure, and unsatisfactory building design are likely to cause some physical discomfort for the students and are therefore bound to influence their academic performance. It is against this backdrop that this study tries to investigate the impact of learning environment on the academic performance of secondary school students in Enugu North Local Government Area of Enugu State. School location will be investigated in this study as a variable which could influence learning environment and students' academic performance.

Purpose of the Study

The purpose of this study is to determine the impact of learning environment on the academic performance of secondary school students in Enugu North Local Government Area of Enugu State. In specific terms, this study aims to determine the:

1. influence of school physical environment on the academic performance of secondary school students in Enugu North Local Government Area of Enugu State.
2. influence of school library on the academic performance of secondary school students in Enugu North Local Government Area of Enugu State.
3. influence of laboratory facilities on the academic performance of secondary school students in Enugu North Local Government Area of Enugu State.

Research Questions

The following research questions will guide this study:

1. What are the mean responses of SS 2 students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school physical environment on their academic performance?
2. What are the mean responses of SS 2 students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school library on their academic performance?
3. What are the mean responses of SS 2 students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school laboratory facilities on their academic performance?

Hypotheses

The following null hypotheses are formulated to guide the study:

- HO₁:** There is no significance difference in the mean responses of SS 2 students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school physical environment on their academic performance.
- HO₂:** There is no significance difference in the mean responses of SS 2 students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school library on their academic performance.
- HO₃:** There is no significance difference in the mean responses of SS 2 students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school laboratory facilities on their academic performance.

Literature Review

Various studies have been carried out on learning environment and students' academic performance. Hills (2019) attributed poor performance of students in Biology to the poor state in which science is taught in our schools, perhaps due to provision of substandard class-sizes and dirty school environment. Koroye (2016) investigated empirically the extent to which physical school environment influences students' academic performance in secondary schools, and revealed that aesthetic beauty of the school and infrastructural facilities significantly influence students' academic performance. Similarly, Baafi (2020) examined and compared the effect of the school physical environment on academic performance of senior high school students, and confirmed that the students in senior high schools with a pleasant physical environment perform better than those where the learning environment is not conducive. In their own study, Dukper, Agyekum, and Konlan (2018) carried assessed the impact of school libraries on students' academic success and the results indicated a positive significant difference in the academic performance of students in schools with libraries and those without libraries in all the items that were investigated. In the same

vein, Suleiman, Hanafi and Tanslikhan (2018) examined the perceived influence of library services on students' academic performance in secondary schools and revealed that library services positively influenced students' academic performance. Furthermore, Olajide and Kutu (2020) investigated the extent of school library influence on students' performance in science subjects in urban and rural areas of Ekiti State, Nigeria and revealed that the majority of available science library resource that supports students' performance in science was textbook, and that the location (rural or urban areas) of schools in the state does not make any difference to students' performance in science subjects. Again, Bonah (2015) investigated the effects of laboratory exercises on science secondary school students' performance in chemistry, and the findings of the study indicated a significant difference in the performance of students exposed to chemistry laboratory exercises and those that are not exposed to chemistry laboratory exercises in secondary schools. In another study, Odutuyi (2015) investigated the influence of laboratory learning environment on students' academic performance in secondary school chemistry and the result showed that there was a significant relationship between the five dimensions of laboratory learning environment and students' performance in chemistry. Finally, Igbara and Okeke (2018) examined the relationship between laboratory and boarding facilities and students' academic performance in public secondary schools, and the findings showed that a low positive relationship existed between laboratory and boarding facilities provision and students' academic performance in public secondary schools.

Review of empirical studies showed that some studies had been carried out in some related areas to the study at hand, for instance, some studies associated with school physical environment and academic performance, school library and academic performance, and school laboratory and academic performance have been done. Different findings were obtained by the reviewed studies carried out in different locations. However, none of the works available to the researcher seem to have focused on the influence of learning environment on students' academic performance in secondary schools in Enugu North Local Government Area of Enugu State. Thus, there was dearth of empirical works done that focused directly on the variables of interest in this study. The present study, therefore, sought to explore the impact of learning environment on students' academic performance in secondary schools in Enugu North Local Government Area of Enugu State, Nigeria.

Methods

This study employed descriptive survey research design. The population of the study consists of the 2,556 senior secondary two (SS 2) students in the 9 public secondary schools in Enugu North Local Government Area of Enugu State (Enugu State PPSMB Statistics, 2024). Multistage sampling procedure was employed to arrive at the sample size. Firstly, simple random sampling technique (balloting) was used to draw four schools (2 urban and 2 rural) from the 9 secondary schools. Secondly, the researchers used simple random sampling technique (balloting) to draw thirty (30) SS 2 students from each of the four schools to make the sample size of one hundred and twenty (120) SS 2 students (60 urban and 60 rural).

Data was collected using the 16-item researcher structured questionnaire titled: "Learning Environment and Academic Performance Questionnaire (LEAPQ)". The responses were measured by means of a four-point likert scale as follows: SA - Strongly Agree (4); A - Agree (3); D - Disagree (2); and SD - Strongly Disagree (1). The instrument which was validated by experts was subjected to reliability test using Cronbach Alpha statistic and the reliability coefficient of 0.85 was obtained. Mean and Standard Deviation statistics were used to answer the research questions, while independent samples t-test statistic was used to test the null hypotheses at 0.05 level of significance. Real limit decision points were used in interpreting the mean responses of the students to the research questions.

Results

Research Question 1: What are the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school physical environment on their academic performance?

Table 1: Mean and standard deviation of the respondents on the influence of school physical environment on their academic performance

S/N	Item Statements	Location	N	X	SD	Decision	Key: 3.50 – 4.00 = Strongly Agree (SA); 2.50 – 3.49 = Agree (A); 1.50 – 2.49 = Disagree (D); 0.50 – 1.49 = Strongly Disagree (SD)
1.	Students in urban secondary schools are exposed to conducive classrooms.	Urban	60	3.58	.70	SA	Tabl e 1 shows the mean
		Rural	60	3.28	1.03	A	
2.	Students in rural secondary schools are exposed to unconducive classrooms.	Urban	60	3.03	1.06	A	
		Rural	60	2.93	1.04	A	
3.	Lack of infrastructures such as seats, lockers hinder learning in rural secondary schools	Urban	60	3.30	.87	A	
		Rural	60	2.90	1.07	A	
4.	Students in urban secondary schools perform better due to availability of learning infrastructures.	Urban	60	3.12	.80	A	
		Rural	60	3.13	.83	A	
5.	Overcrowded classroom influences students' academic performance in rural secondary schools.	Urban	60	2.88	.78	A	
		Rural	60	2.95	.91	A	
Cluster mean		Urban	60	3.17	.57	A	
		Rural	60	3.04	.75	A	

responses of the SS 2 students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school physical environment on their academic performance. It indicates that the mean responses of the SS 2 students in the urban secondary schools to items 1 – 5 is in the limit decision point of 2.50 – 3.49 and 3.50 – 4.00, and that of the SS 2 students in the rural secondary schools to the same items are in the limit decision points of 2.50 – 3.49. It therefore, implies that both the students in the urban and rural secondary schools in Enugu North LGA agree to the statements in items 1 – 5. However, the overall mean ratings of 3.17 (SD = .57) and 3.04 (SD = .75) for the SS 2 students in the urban and rural secondary schools, respectively imply that the students in the urban secondary schools obtained higher mean ratings than their rural counterparts. It also implies that the academic performance of the SS 2 students in both the urban and rural secondary schools in Enugu North LGA is influenced by school physical facilities either positively or negatively.

Hypothesis 1: There is no significant difference in the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school physical environment on their academic performance.

Table 2: t-test scores on the influence of school physical environment on students' academic performance in secondary schools in Enugu North LGA

Location	n	X	SD	df	T	Sig.	Decision
Urban	60	3.17	.57	118	1.08	.284	HO ₁ Accepted
Rural	60	3.04	.75				

Table 2 shows the t-test score on the mean responses of SS 2 students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school physical environment on their academic performance, $t(118) = 1.08, p = .284$. Since the p -value of .284 is greater than the 0.05 probability level set for the study, the null hypothesis which states that there is no

significant difference in the mean responses of SS 2 students in Enugu North LGA on the influence of school physical environment on their academic performance is accepted. This implies that there is no significant difference in the mean responses of SS 2 students in Enugu North LGA on the influence of school physical environment on their academic performance.

Research Question 2: what is the mean response of the urban and rural senior secondary students in Enugu North Local Government Area on the influence of school library on their academic performance?

Table 3: Mean and standard deviation of the respondents on the influence of school library on students' academic performance in secondary schools in Enugu North LGA

S/N	Item Statements	Location	n	X	SD	Decision	Key: 3.50 – 4.00 = Strongly Agree (SA); 2.50 – 3.49 = Agree (A); 1.50 – 2.49 = Disagree (D); 0.50 – 1.49 = Strongly Disagree (SD)
6.	Well equipped library motivates the students and prepare them to intensive reading	Urban	60	3.08	.74	A	
		Rural	60	3.25	.73	A	
7.	Well equipped library also help the teachers to teach well	Urban	60	3.35	.52	A	
		Rural	60	3.20	.71	A	
8.	Library improves positive attitudes towards learning	Urban	60	3.72	.61	SA	
		Rural	60	3.55	.79	SA	
9.	Library provides the students with opportunity of having varieties of resources on a particular topic or course	Urban	60	3.62	.61	SA	
		Rural	60	3.43	.93	A	
Cluster mean		Urban	60	3.44	.40	A	
		Rural	60	3.36	.50	A	

Tabl

e 3 shows the mean responses of the SS 2 students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school library on their academic performance. It indicates that the mean responses of the SS 2 students in the urban secondary schools to items 6 – 9 is in the limit decision point of 2.50 – 3.49 and 3.50 – 4.00, and that of the SS 2 students in the rural secondary schools to the same items are in the limit decision points of 2.50 – 3.49 and 3.50 – 4.00. It therefore, implies that both the students in the urban and rural secondary schools in Enugu North LGA agree to the statements in items 6 – 9. However, the overall mean ratings of 3.44 (SD =overall mean of 3.44 (SD = .40) and 3.36 (SD = .50) for the SS 2 students in the urban and rural secondary schools, respectively imply that the students in the urban secondary schools obtained higher mean ratings than their rural counterparts. It also implies that the academic performance of the SS 2 students in both the urban and rural secondary schools in Enugu North LGA is influenced by school library.

Hypothesis 2: There is a significance difference in the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school library on their academic performance.

Table 4: t-test scores on the influence of school library on students' academic performance in Enugu North LGA

Location	n	X	SD	df	t	Sig.	Decision
Urban	60	3.44	.40	118	1.00	.318	HO ₂ Accepted
Rural	60	3.36	.50				

Table 4 shows the t-test score on the mean responses of SS 2 students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school library on their academic performance, $t(118) = 1.00$, $p = .318$. Since the p -value of .318 is greater than the 0.05 probability level set for the study, the null hypothesis which states that there is no significant difference in the mean responses of SS 2 students in Enugu North LGA on the influence of school library on their academic performance is accepted. This implies that there is no significant difference in the mean responses of SS 2 students in Enugu North LGA on the influence of school library on their academic performance.

Research Question 3: What are the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school laboratory facilities on their academic performance?

Table 5: Mean and Standard deviation of the respondents on the influence of school laboratory facilities on students' academic performance in Enugu North LGA

S/N	Item Statements	Location	N	X	SD	Decision	Key: 3.50 – 4.00 = Strongly Agree (SA); 2.50 – 3.49 = Agree (A); 1.50 – 2.49 = Disagree (D); 0.50 – 1.49 = Strongly Disagree (SD)
10.	Inadequate modern laboratory facilities leads to poor academic performance	Urban	60	3.15	1.04	A	Table 5 shows the mean responses of the SS 2 students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school laboratory facilities on their academic performance. It indicates that the mean responses of the SS 2 students in the urban secondary schools to items 10 – 12, 14 – 16 is in the limit decision point of 2.50 – 3.49, and that of the SS 2 students in the rural secondary schools to the same items are in the limit decision points of 2.50 – 3.49. It therefore, implies that both the students in the urban and rural secondary schools in Enugu North LGA agree to the statements in items 10 – 12, 14 - 16. Again, the mean responses of the SS 2 students in the urban secondary schools to item 13 is in the limit decision point of 1.50 – 2.49, and that of the SS 2 students in the rural secondary schools to the same items are in the limit decision points of 1.50 – 2.49. This implies that the SS 2 students in both the urban and rural secondary schools in Enugu North LGA disagree to that teaching efficiency is reduced with inadequate laboratory equipment. However, the overall mean ratings of 2.97 (SD = .46) and 3.03 (SD = .48) for the SS 2 students in the urban and rural secondary schools, respectively imply that the students in the rural secondary schools obtained higher mean ratings than their urban counterparts. It also implies that the academic performance of the SS 2 students in both the urban and rural secondary schools in Enugu North LGA is influenced by school laboratory facilities.
		Rural	60	3.28	.94	A	
11.	Inadequate modern science and other laboratory facilities lead to poor academic performance	Urban	60	3.08	1.05	A	
		Rural	60	3.00	1.07	A	
12.	Learning becomes boring to students as they easily lose interests in the absence of modern laboratory equipment	Urban	60	3.37	.66	A	
		Rural	60	3.28	.80	A	
13.	Teaching efficiency is reduced by inadequate laboratory equipment	Urban	60	2.30	.89	D	
		Rural	60	2.45	.87	D	
14.	Learning becomes boring to students and they can easily lose interest where there is inadequate instructional materials	Urban	60	3.10	.75	A	
		Rural	60	3.12	.74	A	
15.	My learning experiences improved positively with my exposure to modern laboratory facilities	Urban	60	2.75	.77	A	
		Rural	60	2.83	.85	A	
16.	Modern laboratory equipment allows me to match practical with theory during learning experiences	Urban	60	3.02	.83	A	
		Rural	60	3.22	.85	A	
Cluster mean		Urban	60	2.97	.46	A	
		Rural	60	3.03	.48	A	

students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school laboratory facilities on their academic performance. It indicates that the mean responses of the SS 2 students in the urban secondary schools to items 10 – 12, 14 – 16 is in the limit decision point of 2.50 – 3.49, and that of the SS 2 students in the rural secondary schools to the same items are in the limit decision points of 2.50 – 3.49. It therefore, implies that both the students in the urban and rural secondary schools in Enugu North LGA agree to the statements in items 10 – 12, 14 - 16. Again, the mean responses of the SS 2 students in the urban secondary schools to item 13 is in the limit decision point of 1.50 – 2.49, and that of the SS 2 students in the rural secondary schools to the same items are in the limit decision points of 1.50 – 2.49. This implies that the SS 2 students in both the urban and rural secondary schools in Enugu North LGA disagree to that teaching efficiency is reduced with inadequate laboratory equipment. However, the overall mean ratings of 2.97 (SD = .46) and 3.03 (SD = .48) for the SS 2 students in the urban and rural secondary schools, respectively imply that the students in the rural secondary schools obtained higher mean ratings than their urban counterparts. It also implies that the academic performance of the SS 2 students in both the urban and rural secondary schools in Enugu North LGA is influenced by school laboratory facilities.

Hypothesis 3: There is no significant difference in the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school laboratory facilities on their academic performance.

Table 6: t-test scores on the influence of school laboratory facilities on students' academic performance in Enugu North LGA

Location	n	X	SD	df	t	Sig.	Decision
Urban	60	2.97	.46	118	-.69	.491	HO ₃ Accepted

Rural	60	3.03	.48
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Table 6 shows the t-test score on the mean responses of SS 2 students in both urban and rural secondary schools in Enugu North LGA, Enugu State on the influence of school laboratory facilities on their academic performance, $t(118) = -.69, p = .491$. Since the p -value of .491 is greater than the 0.05 probability level set for the study, the null hypothesis which states that there is no significant difference in the mean responses of SS 2 students in Enugu North LGA on the influence of school library on their academic performance is accepted. This implies that there is no significant difference in the mean responses of SS 2 students in Enugu North LGA on the influence of school laboratory facilities on their academic performance.

Discussion

The findings of this study revealed that the academic performance of students in both urban and rural secondary schools is influenced by school physical environment either positively or negatively. The study also revealed that there is no significant difference in the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school physical environment on their academic performance. This is in line with the findings of Koroye (2016) and Baafi (2020) who in their separate studies revealed that conducive school physical environment significantly enhanced students' academic performance. This, therefore, implies that students should always be taught under a conducive learning environment to improve their academic performance. Learning under unconducive school environment could impact both teachers and students negatively. A classroom exposed to noise, air pollution, lack of ventilation, good lighting and infrastructures such as seats and lockers hinder learning.

Evidence in the study reveals that the academic performance of urban and rural students in the secondary schools in Enugu North Local Government Area are equally influenced by the availability or lack of school library facilities, though the students at the urban centers obtained higher mean score, which indicates more exposure than their rural counterparts. The findings of the study also showed that there is no significant difference in the mean responses of students in the urban and rural secondary schools in Enugu North Local Government Area on the influence of school library on their academic performance. This agrees with the findings of Dukper et al (2018); Suleiman et al (2018); and Olajide and Kutu (2020) who in their separate findings revealed that school library facilities significantly influence students' academic performance. This implies that schools should provide well-equipped libraries and encourage students to make use of the library. Well equipped library motivates the students and prepares them to intensive reading. It also helps the teachers to teach well and improves positive attitudes towards learning. It also provides the students with opportunity of having varieties of resources on a particular topic or course. When students make use of the school library, there is bound to be improvement in their academic performance.

The findings of the study also revealed that students in urban and rural secondary schools in Enugu North Local Government Area have equal influence of laboratory facilities on their academic performance, though the urban students obtained a higher mean score than their rural students which indicates more impact. The findings also indicated that there is a significant difference in the mean responses of the students of urban and rural secondary schools in Enugu North in LGA on the influence of laboratory facilities on students' academic performance. This is on line with Bonah (2015); and Odutuyi (2015) who in their separate findings revealed that school laboratory facilities significantly influenced students' academic performance. However, Igbara and Okeke (2018) found that there is low positive relationship between school laboratory facilities and students' academic performance. The use of laboratory facilities for teaching and learning increases the probability that students would learn more and would be capable of understanding abstract ideas. The school laboratories should be well-equipped and utilized for students to have concrete experience which will invariably improve their academic performance.

Conclusion

From the finding of this study, it was observed that, school physical environment has significant influence on students' academic performance. The study also revealed that school library has significant influence on students' academic performance in secondary schools. It also found out that school laboratory facilities have significant influence on students' academic performance.

Recommendations

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

1. Educational administrators should ensure that classroom physical environments are conducive for learning to enhance students' academic performance.
2. Government and school proprietors should ensure that well-equipped libraries are built in schools and utilized by students to improve on their academic performance.
3. Educational administrators and stakeholders should ensure that school laboratories are well-equipped for effective teaching and learning.

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