



Teachers' experience and school physical environment as correlate of students' academic performance in secondary schools in south east, Nigeria

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ABSTRACT

This study investigates the correlation between teachers' experience, school physical environment and academic performance of students' in secondary schools across South East, Nigeria. Utilizing a correlation research design, data were collected from a sample of 357 teachers and students from public secondary schools in the region. Two validated instruments- Teachers' Experience (TESPEQ) and School Physical Environment and students academic performance questionnaire (SAPQ) were employed to assess the relevant variables. Analysis conducted using Pearson's Product Moment Correlation Coefficient, revealed a positive strong relationship ($r = 0.810$) between teacher experience and students' academic performance whereas a positive moderate correlation ($r = 0.694$) was noted between school physical environment with academic performance of students. These findings suggest that while investment in training programmes that enhance teaching practices, classroom management and subject matter expertise that investing in improving the physical environment of schools such as providing a well-maintained classrooms, modern learning facilities, and adequate resources are critical to improving student outcomes. It therefore recommended that school authority should adopt recruitment policies that prioritize the hiring of well-qualified and experienced teacher, school infrastructure should be regularly assessed and improved. Future research should incorporate more comprehensive measures and consider additional variables that may influence academic performance in South East Nigeria.

1. Introduction

Teachers act as the backbone of educational planning, facilitating both qualitative and quantitative outcomes that ensure the achievement of educational goals. Teachers are central to the educational process, serving as indispensable resources within the system. Hervie and Winful (2018) describe teachers as professionally trained individuals who guide students' learning, ensuring academic success and helping students achieve their potential and establish meaningful careers. Ezea (2017), highlights that the effectiveness of any educational program depends on knowledgeable teachers. Supporting this, Inyama (2021) emphasized that even the best educational policies may fail if teachers do not implement them effectively. This underscores the pivotal role of teachers in influencing students' academic performance.

As viewed by Ibok and Akpanim (2014) "the length of teaching experience, teacher's attitude towards the subject and social climate of the classroom may be related to the student's performance. Tagore in Pankajam (2017) stated that the teacher can never freely teach unless he is still learning himself. A lamp can never light another lamp unless it continues to develop himself intellectually, if he will assist the intellectual development of his students, he himself must be intellectually curious. Lack of years of experience has been a major factor to ineffective

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teaching and poor performance of students in schools because the concept of the subject taught by unqualified and inexperienced teachers cannot be comprehended by students (Inyama, 2021). As postulated by Frank in Inyama (2021), “no matter how good a curriculum may be, it can be rendered worthless in the hands of a non-critical and inexperienced teacher”. He further added that “teachers therefore are the determinants of the quality of education and product from our schools”. Teachers’ field experiences are among the most important components in the professional development of quality teachers. Teaching experience is designed to link the knowledge base presented in the classroom to the independent activities expected of beginning teacher.

Teacher teaching experience refers to the length of time a teacher has been involved in teaching and the resultant mastery of the pedagogical ideology required for effective teaching and learning. It may be connected with the teacher’s age, but differs from the numerical age of the teacher. It is how long and how well a teacher has taught and understood what is involved in teaching. Similarly, Odumbe, Simatwa and Ayodo (2015) noted high teacher experience as one of the factors that enhance performance in day secondary schools. In the same vein, Ong’ele (2017) established that teachers with more teaching experience performed better in actual classroom teaching than those with less teaching experience. This can be made more explicit by the fact that experienced teachers have a mastery of subject areas and its scope are well versed in examination techniques, take keen interest in revision and examination techniques (Omariba in Emeruwa, 2018). Experience in this case deals with number of years the teachers have impacted in teaching and learning. The above are in agreement with what Uche (2012) posited, that experience entails detailed exposure to subject matter in terms of advanced degree programmes and years the teacher has been able to teach that subject successfully, effectively and efficiently. Similarly, Rosner (2011) observed that teacher experience varied among teachers and had an effect on what happens in the classroom when a teacher interacts with her students. However, Bruce, Bruce, Hersh and Mckibbin in Emeruwa (2018), are of different opinion, stating that however experienced the teachers are, without a high quality of effort, other factors alone make little difference. From the aforementioned, it is deduced that a teacher’s effectiveness is derived from his experiences, which is also appraised under his or her personality trait, intelligence, methods, process and product. Experienced teachers are creative and tend to motivate students by using creative and inspirational methods of teaching. The application of sense of humor in teaching also helps in reducing barriers and lightens the atmosphere especially in subjects that involve calculations and during heavy periods. Experienced teacher has proper command of control and school ethics in the following: classroom management, Learning resources, communication, and students’ assessment/evaluation.

Teachers as human resources ought to be educationally trained and experienced. Russel (2020) emphasized on the importance of background qualifications, attitudes and instructional practices of teachers on students’ learning outcome. According to them, teachers should be content driven. That is, they should have the fundamental knowledge and mastery expected to be inculcated to the students and which should be designed in line with the level of the learner. The importance of training and experience cannot be overlooked in any organization, be it private or public (Adeogun, 2006). He maintained that an employee who is not trained, experienced and exposed to modern innovations and methods in his or her field will soon become irrelevant to the organization and the society at large. This study will further review environment as another important quality of a classroom teacher.

Similarly, Federal Republic of Nigeria (FRN) (2013) outlined secondary educational goals to include: useful living within the society and preparation for higher education. Teachers play a vital role in the attainment of this objective. Teacher experience alone however may not produce the desired results without a good school work environment Njoku, (2025)

Environment is the space occupied and surroundings of an organization, community and market. It is the compound or space accommodated by a particular event, organization or

community (Lawanson & Gede, 2015). From the above definitions, it is obvious to note that for students to perform well there should be an environment where they gather and study. Such an environment is referred as school work environment. The school work environment can be physical as well as social. According to Sawyer (2014), physical environment can be described as school plant or physical facilities in the school, while social environment entails the organizational culture and climate of the school.

Physical environment of a school or school plant can be defined as the school compound ranging from recreation, instruction, administrative, convenient, and farm spaces where educational activities of a particular level (secondary) are practiced. As viewed by Tattoo (2010), school physical environment refers to all types of buildings, areas for sports and games, landscape, farms and gardens including trees and paths. Others include furniture and toilet facilities, storage facilities, transportation, Information and Communication Technology (ICT), food services among others. However, Nwokike (2022) enumerated the components of physical environment to include; recreation, administrative, instruction, farm and convenient spaces in the school. This is supported by Odoh (2018), who argued that 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.

Instructional space can be described as part of school environment used specifically for teaching and learning. According to Ani (2017), instructional space is seen as classrooms and other buildings such as laboratory, studio and workshops where teachers teach students. Instructional space as enumerated by Odufowokan in Nwankwo (2020) includes; well ventilated classrooms, with all the facilities such as white board, desks, seats and teaching aids used to beautify the class. He further explained that well equipped laboratories that are functional are part of instructional space/environment in secondary schools. Odufowokan further revealed that most of the classroom blocks in South East, Nigeria are in deplorable conditions where the roofs leak, doors, windows and seats are damaged, which posed to disrupt the conduciveness of the class and retard students' high performance. Moreso, Fenster (2018) revealed that during raining season, some public secondary schools in Benue State hardly learn due to poor nature of the roofs and floor of the classrooms. Another important aspect of school physical environment that seem to serve as a determinant to students' academic performance is recreation space/environment. Recreation space simply means surroundings in secondary schools where sports and relaxation activities are organized. Recreational space as postulated by Enaohwo and Ninikanwa (2014) is locations in school where indoor and outdoor sporting activities are carried out. The scholars further opined that recreation space entails fields, tracks, lawns and other facilities required for effective teaching and learning of physical education. Nwokike (2012) revealed that recreation spaces and its activities influence students' academic performance to a low extent in secondary schools in South -South, Nigeria. In support of the above, Nwokike further revealed that recreation spaces such as tracks and lawns no longer exist in most secondary schools in Nigeria. From the foregoing, physical environment encompasses varying dimensions of facilities in the school environment that can be seen.

Also, Basil & Nathaniel (2017) defined it as the totality of physical resources that interprets teaching and learning activities of a school. This aspect of physical environment entails all the objects and buildings used basically for secondary schools' administrative purposes. As observed by Sawyer (2014), administrative space as one of the essential facilities of a school that is used for effective administration of schools in order to achieve its goals. Sawyer further opined that school administrative environment includes staff room, principals' office, vice-principal's office, bursars' office, school clinics and clerk's office that are well equipped with tables, seats, stationary, computers, printer, calendars and educational magazines. In another opinion, Tompere (2016) revealed that staff rooms of teachers in Bayelsa negatively correlate with students' academic performance. Instructional space or environment is another vital component of school physical environment that seem to influence students' academic

performance. Instructional space is the part of school physical environment that described the physical facilities specifically used for teaching and learning of schools. For clarity, Ibukun et al (2012) defined instructional space as part of the school surroundings and materials used for teaching and learning activities. Tompere (2016) described instructional space as areas in school mainly used for instructional activities. Tompere also opined that instructional activities in school are teaching, moral instructions, experimental classes, seminars and workshops. As observed by Adesehinwa (2013) instructional space influence students' academic performance to a low extent in secondary schools in Kogi state. Adesehinwa further revealed that most secondary schools in south-south do not have functional library and laboratory that can enhance excellent performance of students. Another important school physical environment is recreational space.

Recreational space can be defined as school surroundings where games and relaxation activities are carried out. As viewed by Tattoo (2010) recreational space is areas in the school premises where indoor and outdoor games are organized. The authors maintained that recreational space is one of the essential area in the school environment and such spaces includes; tracks, fields, lawns, gymnasium, studio and other facilities used in teaching and learning physical education in secondary schools. In support of the above, Lawanson & Gede (2015) revealed that recreational spaces such as tracks, lawns and gymnasium influence students' performance to a low extent in Osun state. They further maintained that most secondary schools do not have well-furnished studio and gymnasium, which however show negative relationship with students' academic performance. School physical environment generally is as important as the school and have its influence on both teacher and students' performance in secondary schools in south-east. However, Nigerian secondary schools often face challenges of ineffectiveness and under-performance. These issues stem from poor classroom management, inadequate managerial skills, unconducive working environments, low teacher experience, insufficient supervision, and weak evaluation systems (Onuoha, 2019). Teachers hold the key to societal advancement, and the quality of a school's learners reflects the caliber of its staff. Teachers inspire interest and drive success in teaching and learning environments. Their experience in specific subjects significantly impacts students' attitudes and performance in those areas.

Statement of the Problem

Educational activities especially in secondary schools should be carried out in a serene environment where all the recreational, instructional spaces and facilities are adequate. In addition, this environment needs to be complemented by experience teachers who should be able to exhibit their skills for improved learning outcome. Unfortunately, the reverse seems to be the case in many secondary schools in South East, Nigeria. The schools appear to be characterized by poor environment such as dilapidated buildings, inadequate instructional materials, bushy fields and noisy environment. This condition creates an un-conducive school environmental climate which can have negative effect on students' academic performance. It is also of interest to know that many teachers in secondary schools in Nigeria seem to exhibit some traits unbecoming of a quality teacher such as, laissez-faire demeanour, poor attitude to work and other ineffective practices in their work. This ugly incidence consequently leads to poor academic performance of students which manifests in several ways such as lack of interest in class work, inability to comprehend lesson, inability to pay attention in the class, inability to recall information, failure to possess required instructional materials, inability to demonstrate skills in class operations among others.

Purpose of the Study

The main aim of this study was to examine teachers' experience and school physical environment as correlates of students' academic performance in secondary schools in South-East Nigeria.

The study was guided by the following specific objectives:

1. ascertain the relationship between teachers' experience and students' academic performance in secondary schools;
2. determine the relationship between school physical environment and students' academic performance in secondary schools;

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance to guide the study:

H0₁: There is no significant relationship between teachers' experience and students' academic performance.

H0₂: There is no significant relationship between school physical environment and students' academic performance.

Methodology

The study explores the correlation between Teachers' Experience and School Physical Environment as correlate of Schools Academic Performance in Secondary Schools in South East, Nigeria. A correlation research design was adopted to examine the relationships between variables. The South-East region, chosen for its strong emphasis on education, includes Abia, Anambra, Ebonyi, Enugu, and Imo States. The population comprised 43,730 teachers and students from public secondary schools, with a final sample of 357 respondents selected through a multi-stage sampling process that ensured representation across all states.

Data collection relied on two structured questionnaires, the Teachers' Experience and School physical Environment Questionnaire (TESPEQ) and the Students' Academic Performance Questionnaire (SAPQ), each validated and tested for reliability. Experts in educational management and measurement evaluated the instruments, while a pilot test in Akwa Ibom State confirmed their reliability, with indices of 0.79 and 0.77, respectively. Responses were gathered through direct distribution by the researcher and trained assistants, achieving a high response rate of 95.8%.

Data analysis utilized Pearson's Product Moment Correlation Coefficient to determine relationships among the variables, and linear regression to explore specific associations at a 0.05 significance level. Correlation strength was categorized using Creswell's guidelines, providing insights into how teachers' experience and school physical Environment interact to influence students' academic outcomes. The findings aim to inform strategies for improving school performance and creating a supportive educational environment.

Data Presentation /Results

Research question 1: What is the extent of relationship between teachers' experience and students' academic performance?

Hypothesis 1 (H0₁): There is no significant relationship between teachers' experience and students' academic performance.

Table 1: Relationship between Teacher's Experience and Students' Academic Performance in Secondary Schools

Correlations		Teacher Experience	Academic Performance
Teacher Experience	Pearson Correlation	1	.810**
Academic Performance	Pearson Correlation	.810**	1
	N	342	342

Table 1 indicates a correlation coefficient of .81 which is positive and within the .70 to .10 correlation coefficient scale of Creswell (2009). This indicates that teacher experience has positive strong relationship with academic performance of students in secondary schools.

Research Questions 2: What is the extent of relationship between school physical environment and students' academic performance?

Hypothesis 2 (H0₂): There is no significant relationship between school physical environment and students' academic performance.

Table 2: Relationship between School Physical Environment and Students' Academic Performance in Secondary Schools

Correlations		School Physical Environment	Academic Performance
SchoolPhysical Environment	Pearson Correlation	1	.694**
Academic Performance	Pearson Correlation	.694**	1
	N	342	342

Table 2 indicates a correlation coefficient of .69 which is positive and within the .30 to .69 correlation coefficient scale of Creswell (2009). This indicates that school physical environment has positive moderate relationship with academic performance of students in secondary schools.

Discussion of Findings

Result from research question one showed that teacher experience has positive strong relationship with academic performance of students in secondary schools. Studies have highlighted the critical role of teacher experience in enhancing student academic achievement. Experienced teachers are better equipped to manage classrooms, deliver content, and differentiate instruction, which contributes to better student learning outcomes. This also agrees with Denise (2016) who opined that experienced teachers are more likely to have developed strong classroom management techniques that minimize disruptions and create a conducive learning environment.

The finding in research question 2 revealed that school physical environment has positive moderate relationship with academic performance of students in secondary schools. The corresponding hypothesis indicates that this relationship is significant. This suggests that improvements in the physical conditions of the school—such as infrastructure, classroom conditions, and learning facilities—are associated with better academic outcomes for students.

Conclusion

Consistent with previous literature, these results highlight the need for continuous professional development, improved pedagogical techniques, and effective classroom management as essential drivers of academic excellence. Furthermore, physical environment of a school was also identified as a significant predictor of student outcomes. Initiatives aimed at developing teacher competencies, improving school infrastructure, Future research could explore further nuances of these relationships, including how different school physical environments interact with specific aspects of teacher experience to impact student performance in diverse contexts.

Recommendations

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

1. Schools should adopt recruitment policies that prioritize the hiring of well-qualified and experienced teachers.
2. School infrastructure should be regularly assessed and improved by school authorities.
3. School administrators should be provided with the training and tools necessary to effectively support both teachers and students.

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