



IMPACT OF ENVIRONMENTAL FACTORS ON STUDENTS' ACADEMIC PERFORMANCE IN SOME SELECTED SECONDARY SCHOOLS IN ADO-EKITI

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Abstract

The study examined the impact of environmental factors on academic performance of students in some selected secondary schools in Ado-Ekiti. This study employed descriptive research design of the survey type. The population consisted of SS 2 students in all public secondary schools across Ado Local Government Area of Ekiti State. A sample of 150 students was drawn from 10 secondary schools across the local government. Purposive sampling technique was employed to select 15 students from each school. A self-constructed questionnaire was used to elicit relevant data for the study. The instrument was validated by experts in Social Studies. It was also subjected to reliability test through test re-test method that yielded 0.73 coefficients. Data collected were analyzed using inferential statistics of students't-test analysis. All hypotheses were tested at 0.05 level of significance. The study revealed that there is a significant relationship between home environment, school environment, parents and family size on the academic performance of students. Based on the findings it was recommended that students' homes should give room to enhance students reading ability, school environment should be made conducive to foster teaching and learning, uneducated parents should find a means of improving the academic pursuit of their children by organizing for lesson teachers, parents should give birth to moderate number of children so as to meet up with their daily needs.

Key Words: Environment, Environmental factor, Academic performance, Secondary school students

Introduction

Education is a veritable tool for national development. It is regarded as the bedrock of the nation and plays 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. With the assertion that education is a fundamental right, it is important to ensure that the student 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 is largely tied to environmental factors (Okoi, Okoi & Eteng, 2022). Environment plays a major role in the life of every individual, whether students or non-students'. Environment can be defined as a system within which living organisms interacts with the physical elements, it can also be seen as aggregate of all the external condition and influence affecting the life and development of an organization while educational environment is a learning place where the learner learn and interact with learning facilities in order to be socialized and face the challenges in the society. The environment of the students which

involve the school, the family, peer group are of paramount importance in shaping and reshaping the academic ability of the students. The impact of the environment remains an important area that should be studied and well managed in the secondary schools to enhance students' academic performance. A school is an environment where knowledge is acquired at various levels. The environment where this knowledge is acquired is as important as the knowledge itself (Ojimba, Iroegbu & Amugo, 2019). With the increase in the population of Nigeria there is need in infrastructure, social amenities, housing, schools, jobs etc. to cater for the growing population.

Environmental impact before now have not been considered as one of the factors that affect academic performance in secondary schools hence it has little or no attention in educational discourse and consideration. But over the past decade remarkable studies have indicated a correlation between the environment and academic performance of students. Environment plays major role in the life of every individual whether a students, teachers, employer or employee. Though some people are yet to believe that environment brings about better performance (Orlu, 2013).

Environment is a place where one lives, or resides, it is a dwelling place together with a family or social unit that occupies it, a household. Environment



consists of social and physical make up. The social make up involves all the social interactions within the environment, which include emotional climate, eating meals, doing laundry, playing games, concert, going shopping, picnic among others. While physical environment covers those things that can be seen or touch within the home that support lives (Joseph, 2012).

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Many schools in the area of education in recent past seemed to have shifted studies from the measures of individual to the measure of the environment. The reason that could be adduced for this trend ranges from the accurate prediction which measures of environment could bring to learning in order to possibly manipulate the environment so as to bring about optimal conditions for learning (Alokan & Arijesuyo, 2013).

The educational sector is one of the sectors in economic development of a nation and has evidently felt a lot of pressure in ensuring that education for all secondary schools being an intermediate institution as point of emphasis have increased overtime from the past and presently we have more than 11,000 secondary schools (Federal Ministry of Education, 2014). Overtime research has explored the maintenance of the facilities within the school buildings like classrooms, libraries, laboratories, workshops, assembly halls, toilets, sickbay etc. and how their deterioration affect the students and have identified problems such as inadequate funding, inadequate facilities, low staff morals, poor supervision of schools, frequent change in policies environment etc. as a major factor that affects students' performance in secondary schools (Timilehin, 2010). The factors that will be considered in relation to environment are location of the home (whether rural or urban, parents' level of education and family size especially as they affect student academic performance in Government. The academic performance of students has been of concern to parents, guardians, students and even the wider society.

Family is the first social environment the child finds itself. Family environment can increase or

decrease the academic performance of the child. Ojimba, *et al.*, (2019) defined family as a small kinship structural group with the key function of natural socialization of the new born family background which refers to all the conditions and circumstances in the family which influence the child physically, intellectually and emotionally (Muola, 2010). Children coming from different family background are affected differently by such family conditions. Some children have good (rich) family background while some have poor background.

In Nigerian setting, there is no regulation of the family size; hence, one can bear as many children as one deserves. This has led to the expansion of family sizes ranging from two to infinity. Family size in this context means the number of children and parents in the house. In this, case, the family with five children and above is regarded as large family, while those with one to four children is regarded as small families.

Information from literature shows that children from large families are found to be poor academically than those from smaller families (Ojimba, *et al.*; 2019). The study is therefore directed towards establishing whether home location, parents' level of education and the family size of students are related to students' academic performance in Government in Ado local government area of Ekiti State. Environment is a place where one lives; a residence; physical structure within which one lives, such as house or apartment; a dwelling place together with the family or social unit that occupies it, a household; the place, such as a country or town, where one was born or has lived for a long period of time (Houghton 2009). Environment consists social and physical make up. The social make up are all the social interaction within the home, which include emotional climate, eating meals, doing laundry, playing games, concert, going shopping picnic among others. While physical are those things that can be seen or touch within the home that support lives on the contrary endanger life of individual, electric socket, small objects, electronics, floor or walls, generator, chair and table, kitchen utensil and natural physical features are all examples (Joseph, 2012).

The constituent of environment includes parents, children, buildings as well as related facilities and neighbourhood. Environment is seen as the first place where the child received care and training to enable him or her interacts with the world. The education a child receives from parents is most likely to have a dominant influence upon his behaviour in later life and how a child responds to school life and his performance is likely to be influenced by his environment. Performance in school subjects could be as a result of innate difference in intelligence, however it is also accepted that environment plays a

part in academic performance.

Factors that have been considered as part of home environment includes size of the family, education of the parents, location of the family, parents' attitude towards their children education, motivation and availability of certain functional facilities at home. If one is from a wealthy home there are greater chances and opportunities to provide quality food, adequate clothing, good housing, leisure or recreation, quality home education and moral bringing for their children, are also reflected from environment (Orlu, 2013).

Environmental influence before now has not been considered as one of the factors that affect academic performance in secondary schools hence it has little or no attention in educational discourse and consideration. But, over the last decade, remarkable studies have indicated a correlation between the environment and academic performance of students.

Family size in this context refers to the total number of children in the child's family in addition to the child himself. The type of family that a child comes from either monogamous or polygamous family usually has impact on the child academic performance. Moreover, either of the family type (monogamous or polygamous) dictates the size of the family. Polygamous family is peculiar to Africa in general and in Nigeria in particular. According to Odoh, Ugwuanyi and Chukwuani (2017), polygamous family is a common among well-educated families as well as among poorly-educated families. He added that it is equally common among professional and managerial fathers of the top of the occupational hierarchy although to unskilled workers polygamous is prominent. Children from larger families are found to do worse than children from smaller families as revealed by Nghambi (2014).

He found out those children lower down the birth order do worse than those higher up the birth order. According to Nwogu and Esobhawan (2014), first born or the oldest child is usually advantaged by a good deal of attention and warmth during the early stage on age of life, which he entertains all alone. Observations and studies have shown that more attention and time are usually accorded to the first born. Orlu (2013) reported that parental attention by parents declines as the number of sibling's increases and later born children perform less well than earlier born siblings. Studies carried out in the past on the relationship between academic performance and birth order have shown that there were positive relationships.

Maphoso and Mahlo (2015) in a survey of maternal education and children's academic performance during middle childhood used data from the national longitudinal survey of youth and children between the age of 6 and 12. The study examined

whether increase in parents' educational attainment is associated with changes in children's performance and the quality of their home environment. The results suggested that children of young parents with low level of education performed better on tests of academic skills and have higher quality in terms of home environment. That increase in parent education does not predict improvement in the performance of students. The estimated effect of additional material schooling for children appears to be more pronounced for children's in reading than mathematics skills. The authors here have reported that parents' level of educational attainment does not predict improvement in academic performance of their children. This study therefore is investigating further the influence of parents' education on students' academic performance to see the contributing influence of parents' education to students' performance.

This is because parents' education and children's have direct relationship. In a similar development, Orlu (2013) carried out a research on influence of parents' education on children's literacy skills in secondary schools'. It was found that maternal education was negatively associated with special education placement particularly for a learning disability. He stated that children of parents with less than a high school diploma were twice as likely to be in special education as children of parents with a high school diploma. In addition, Amaechina and Ezech, (2019), found that children of parents who did not graduate from high school were 14 times more likely to repeat kindergarten or first grade compared to children of parents who had graduated from high school.

Home Location and Students' Academic performance Chukwuemeka (2013) found that the mean standardized score of rural children in Chemistry, Physics and Biology tests were significantly lower than those in urban groups. He also reported that a survey carried out in England and Wales by the National Foundation for Education and Research confirmed that urban students' performed better than their counterparts in rural schools. Amaechina and Ezech (2019), compared the performances of rural and urban students in local education authority' secondary schools in selected examination and found that the percentage of rural children was 36% while that of the urban was 56%. Chukwuemeka (2013) studied the incidence of mental deficiency and added a strong warning only on impetuous person would conclude from contemporary data that rural inhabitants as a group generally were inferior in mental endowments to the inhabitants of urban areas.

However, Agiande (2006) working in America, disagreed and stated that rural children were



definitely inferior in general ability as a group to urban children. The researcher observed that the main cause of academic disparity may not be the nature of the rural and urban environment itself but the structure of socio-economic group which the schools draw their students from. These complexes have prompted the researcher to investigate further if location has any influence on students' performance. A study carried out by Aliyu and Ali (2021) on the influence of teacher and school variables on students' performance, claimed considerable evidence to show that home location has influence on students' academic performance. A 60 item Multiple Choice Government Performance Test (MCGPT) was administered on 160 SS3 students randomly selected from 12 secondary schools in 3 local Govt. Areas. These students' included college students, (from rural and urban) and different social classes (upper, middle and low). A t-test analysis revealed a significant difference between the mean performance score of students in rural area and that of those in urban areas (at 0.05 level). Those in urban area performed better than those in rural areas. The study therefore recommended the need to provide required conditions for teaching and learning in all schools. The present study in addition to the variable of location considers the variable of family size and mother education as they affect students' performance in secondary school Government.

Writing on the importance of location, Nghambi (2014) found that it is one of the potent factors that influence the distribution of educational resources. Conceptualized urban environment are those environments which have high population density containing a high variety and beauty and common place views. He further identified the rural environment as being characterized by low population density containing a low variety and isolated place views. Earlier in his contribution, Orlu (2013) corroborated that "rural community is characterized by low population, subsistence mode of life, monotonous and burdensome " citing hotels, recreational centers, markets, banks and good road network as being present in their urban environment. Okoi, Okoi and Eteng (2022) accentuated that our highly qualified teachers prefer to serve therein rather than the rural areas. As a corollary of the above, Owioye and Yara, (2011) observed that teachers do not accept postings to rural areas because their conditions are not up to the expected standard as their social life in the areas is virtually restricted as a result of inadequate amenities; facilities are deficient, playground are without equipment, libraries are without books while laboratories are glorified ones.

According to Emmet and Eur (2011), in their studies on urban and rural differences in general

showed that location of the community in which the school is situated has effect on the performance of pupils. Giving credence to the above, Ajayi (2008) found significant difference in academic performance of students in urban and rural areas of his study. He therefore concluded that the performance must have been borne out of many facilities they were used to which were not available in the rural set up. In his study, Byoung-Suk and Christopher (2012) also observed a significant positive relationship between size and location of school and performances in examination in Oyo State. He concluded that large schools in urban areas tend to perform better in examinations than small schools in rural areas.

Also, Khan, Begum and Imad (2019) in their different studies on the relationship between academic performance and school location revealed that, there was no significant difference between academic performance of students in urban and rural schools. Also, in his study Orlu, (2013) found that there was no significant difference between students' academic performance of rural and urban secondary school students.

Statement of the Problem

Observation revealed that student's academic performance in Junior Secondary School II in Social Studies seems to be poor. This trend is not only disturbing but also very discouraging especially based on the persistent nature of the problem as reflected in the school's broad sheet in Ado-Ekiti.

Significantly, the trend of poor performance was widely attributed to teachers and students related factors. However, this report did not recognize nor emphasize the extent to which certain environmental variables may have affected students' rate of failure in schools. These environmental variables include socio-economic status of the parents, home location, number of siblings within the family and educational background of the parents among others.

Although this position is not substantially conclusive, it is logical to assert that the home environment from where the child is nurtured could influence his or her perception and orientation towards learning. Thus, a child from a home environment furnished with essential aids to learning such a good neighbourliness, electricity, televisions set, computer set among other things is likely to learn better than a child from home where these things are lacking. It becomes imperative to carry out empirical research to find out whether environment contributes to secondary school students' academic performance in Government.

Purpose of the Study

The purpose of this study is to assess the impact

of environmental factors on academic performance in some selected secondary schools in Ado-Ekiti.

Hypotheses

The following null hypotheses were formulated:

1. There is no significant difference between home location and academic performance of students' in Government.
2. There is no significant difference between school environment and the students' academic performance in Government.
3. There is no significant difference between family size of students' and their academic performance in Government.

Methodology

This study employed descriptive research design of the survey type. The choice of survey design is because data were collected from a fairly representative sample of the large students' population so as to make generalizations on the entire population. The study examined the impact of environmental factors on academic performance in some selected secondary schools in Ado Ekiti. The population of this study consisted of SS 2 students in public secondary schools across Ado Local Government Area of Ekiti State. A sample of 150 students were drawn from 10 secondary schools across the local government.

A self-constructed questionnaire was used to elicit relevant data for the study. Section A elicited personal information from the respondents. The section B of the questionnaire is designed towards the title of the study. It contains 15 questions. The instrument was structured in the modified Likert-type on a 4-point scale, ranging from (Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). The data collected were analyzed using inferential statistics of students' t-test analysis. All hypotheses were tested at 0.05 level of significance.

Results

Hypothesis 1: There is no significant difference between home location and students' academic performance in Government.

Table 1: t-test showing the difference between home location and students' academic performance in Government

Variables	N	Mean	S. D	T	P
Home Location	150	33.74	11.46	2.174*	0.000
Academic Performance	150	45.22	15.480		

$p < 0.05$ (Significant Result)

Table 1 shows that the t_{cal} (2.174*) is significant at 0.05 level of significance. The null hypothesis is not accepted, this implies that there is a significant difference between home location and students' academic performance in Government

Hypothesis 2: There is no significant difference between school environment and students' academic performance in Government

Table 2: t-test showing the difference between school environment and students' academic performance in Government

Variables	N	Mean	S. D	T	P
School Environment	150	42.79	13.44	1.670	0.570
Academic Performance	150	45.22	15.480		

$p > 0.05$ (Result Not Significant)

Table 2 shows that the t_{cal} (1.670) is not significant at 0.05 level of significance. The null hypothesis is not rejected, this implies that there is no significant difference between school environment and students' academic performance in Government

Hypothesis 3: There is no significant difference between family size of students' and their academic performance in Government

Table 3: t-test showing the difference between family size and students' academic performance in Government

Family Size	N	Mean	S. D	T	P
Nuclear Family	65	44.20	13.888	0.286	0.082
Extended Family	85	45.22	15.480		

$p > 0.05$ (Result Not Significant)

Table 3 shows that the t_{cal} (0.286) is not significant at 0.05 level of significance. The null hypothesis is not rejected, this implies that there is no significant difference between family size and students' academic performance in Government

Discussion

The finding of this study revealed that there is a significant difference between home location and students' academic performance in Government. This finding is in agreement with the finding of Nghambi (2014), who found out that location is one of the potent factors that influence the distribution of educational resources. This finding also corroborates the finding of Kemijika (2009), who worked on urban and rural differences in general and found out that location of the community in which the school is situated has effect on the performance of the pupils.

The finding also revealed that there is no significant difference between school environment



and students' academic performance in Government. This finding is in contrast to the submission of Orlu (2013), who submitted that a conducive environment enhances a child's growth and development. It is in tandem with (Okoi, Okoi & Eteng, 2022) who postulated that the environment of the students which involve the school, the family, peer group are of paramount importance in shaping and reshaping the academic ability of the students.

The finding further revealed that there is no significant difference between family size and students' academic performance in Government. This finding is in line with the finding of Odoh *et al.*, (2017), who found out that polygamous family is common well-educated families as well as among poorly-educated families. He concluded that children from larger families are found to do worse than the children from smaller families as revealed by Nghambi (2014).

Recommendations

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

- i. Students' homes should give room to enhance students reading ability.
- ii. School environment should be made conducive to foster teaching and learning.
- iii. Uneducated parents should find a means of improving the academic pursuit of their children by organizing for lesson teachers
- iv. Parents should give birth to moderate number of children so as to meet up with their daily needs

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