
The Influence of Healthful School Environment and Academic Performance of Primary School Pupils in Southwest Nigeria.

J.A. Adegun (PhD), E.O. Alebiosu (PhD) & O. B Ajayi-Vincent (PhD).

Department of Human Kinetics and Health Education,
Ekiti State University, Ado-Ekiti
olusesi.ajayi-vincent@eksu.edu.ng

Abstract

This study investigates the influence of healthful school health environment on academic performance of primary school pupils in southwest Nigeria. The descriptive research design was adopted. 1006 health education teachers were purposely selected from the various primary schools sampled. A self-developed structure and validated questionnaire titled (IHSWQ) of modified Likert's scale with a test-retest reliability value of 0.87 was used for data collection. The data collected were analysed using descriptive statistics such as percentages, inferential statistics such as Pearson Product Moment Correlation Coefficient to test the hypothesis at 0.05 level of significance. The result revealed that physical school environment has significant influence in pupils' academic performance. Based on the findings, it was recommended that state government, parents, health educators, stakeholders, community, agencies, National and international organisations should join hands to improve the status of physical school environment in southwest Nigeria primary schools to boost academic performance.

Keywords: *influence, environment, academic, performance.*

Introduction

Health is an important factor in national development. The fact that the children of today are the adults of tomorrow makes them deserve a safer and healthier school environment. This message was emphasized by the "Healthy Environment for Children Alliance" (HECA). HECA was launched in 2002 at World Summit on Sustainable Development which focuses attention on the school environment which is an essential component of a health promoting school, focuses on a child-friendly school environment meant for social and emotional well-being of school pupils thereby supporting the World Health Organisation's definition of health as a state of complete, physical, mental and social well-being and not merely absence of disease or infirmity.

Environmental challenges and opportunities vary considerably among school around the world across countries within communities. Similarly the resources available to schools to manage health hazards vary as widely as the threats themselves often creating formidable management challenges, particularly in the poorest parts of the world. Evolving from the recommendations of the Ottawa Charter for Health Promotion the physical school environment which is an essential Component of a condition that exists in a variety of school environment. It presents strategies to improve the health education and development of children, families and community members and avoid physical, chemical and biological threats that may exist near their schools.

Healthful school environment encompasses the school building and all its contents including physical structures, infrastructure, furniture and the use and presence of chemicals and biological agents, the site on which a school is located and the surrounding environment including the air, water and materials with which children may come into contact as well as

nearby land uses roadways and other hazards. WHO defines a health promoting school as one that constantly strengthens its capacity as a healthy setting for living, learning and working.

The American Academy of Pediatrics defines a healthful school environment as “one that protects students and staff against immediate injury or disease and promotes prevention of activities and attitudes against known risk factors that might lead to future disease or disability.” Provision of safe and sufficient water, sanitation and shelter from the elements are basic necessities for a healthy physical learning environment. Equally important, is the protection from biological physical and chemical risks that can threaten children’s health and affect their academic performance. Infectious diseases associated with poor construction and maintenance practices are examples of risks children and school personnel face at schools throughout the world. It is therefore important for educators, planners and school administrators to be aware of specific health threats in their own school environments.

Nwana and Ikatu (2002) asserted that a healthful school environment is that which embraces the health and safety of learners and other members of the school community. It attends to the physical and aesthetic surroundings, psychological climate and culture of the school community as defined in the National School Health Policy. Jimoh and Ifabiyi (2003) asserted that healthful school environment encompasses the school building including physical structures, infrastructures, furniture and the use and presence of chemicals and biological agents, the site on which the school is located and the surrounding environment including air, water and materials which children could come in contact such as land uses, roadways and other hazards.

Okafor (2001) defines a health-promoting school as one that constantly strengthens its capacity as a healthy set for living and working. Lucas and Gilles (2006) define a healthful school environment as one that protects pupils and staff against immediate injury or disease. It also promotes the prevention of activities and attitudes against known risk factors that might lead to future disaster or disability. WHO (2001) further stressed that provision of safe and sufficient water; sanitation and shelter from dangerous elements are basic necessities for a healthful school learning environment. Infectious diseases carried by water and physical hazards associated with poor construction and maintenance practices are part of risk pupils and school personnel face at school which should be avoided as much as possible. The influence of healthful school environment cannot be isolated from the education of the child with regards to academic performance in the school (Ekeh 2001). The emphases on provision of healthful living in the school community that favours effective-teaching learning process with the protection and improvement of conditions of the school environment that influences pupils in one way or the other especially the conditions of the building (light, air, sanitation and sitting arrangements, teacher-pupils, teacher-teacher and pupil-pupil relationship are all important for better pupil’s academic performance.

Adedeji (2003) stressed that when there is nice social and emotional school climate that meet the needs of pupils and teachers, there would be effective teaching and learning in the school and better academic performance will ensue. This view was supported by Adeboyeje(2002) who asserted that for a school environment to motivate pupils to learn, it must be attractive and encourage good teaching, permits and protects the health of the entire members of the school. To achieve these, adequate consideration must be given to location of school building with respect to orientation, noise, dust, odours, dangers related to traffics, playground and drainages.

Statement of the problem

The researcher observed that many childhood illnesses and death are greatly influenced by the environment. Leading causes of mortality in school aged 5 to 14 years could be due to high incidence of acute respiratory infections, malaria, diarrheal disease and

injuries. All these could affect the academic performance of school pupils. It seems school children are more susceptible to environmental hazards than adults and therefore need healthy school environment to survive.

It has been observed that many schools are springing up without the necessary health care plan for the welfare of school pupils and staff which could lead to low academic performance. It was also discovered that school attendance and academic performance can improve with increased school maintenance; but many of the primary schools around lacked infrastructure, equipment, personnel and materials necessary for effective learning and sound health of school pupils and staff which could exercise negative influence on academic performance of school pupils.

Purpose of the study:

The study investigated the influence of healthful school environment and academic performance of primary school pupils with particular reference to southwest primary schools in Nigeria. The practice of healthful school environment in public primary schools in southwest was examined.

Research Question

Three research questions were raised for the study:

- (1) What is the level of healthful school environment in southwest Nigeria?
- (2) What is the level of academic performance of school pupils?
- (3) Is there any significant relationship between healthful school environment and academic performance

Research Hypothesis:

One null hypothesis was generated and tested at 0.05 level of significance

-There is no significance relationship between healthful school environment and academic performance of school pupils.

Methodology

The research design for this study is a descriptive research of the survey type. All health educators in public primary schools in southwest Nigeria were involved. The population embraced 1006 health education teachers and primary six pupils using the result of their placement examination from primary six to JSS to determine the influence of healthful school environment on their academic performance. The instrument for the study was a modified four-point Likert-scale questionnaire tagged IHSEQ. The face and content validation of the questionnaire was conducted by experts in the fields of health education and test and measurement; the reliability was through a test-retest method using thirty health educator teachers who were not part of the sample for the test and the result, yielded the reliability coefficient of 0.87.

The questionnaire was administered to 1006 health education teachers from the various schools sampled with the help of two research assistants, The data obtained were analyzed with the descriptive statistics of frequency counts and percentages while Pearson Products Moment Correlation Coefficient was used to test the hypothesis at 0.05 level of significance.

Results:

The data was presented and analyzed as follows:

Table 1: Level of Healthful School Environment in Southwest Nigeria primary schools.

| | Range | Frequency | Percentage |
|-----|-------------|-----------|------------|
| Low | 15.00-35.03 | 151 | 15.0 |

| | | | |
|----------|-------------|------|-------|
| Moderate | 35.04-50.80 | 699 | 69.5 |
| High | 50.81-60.00 | 156 | 15.5 |
| Total | | 1006 | 100.0 |

Table 1 showed the level of healthful school environment in all schools sampled in Southwest Nigeria as computed using percentage score. The result showed that out of 10061 teachers sampled, 151 representing 15% had low level, 699 respondents had moderate level scoring 69.5% while 156 had high level score of 15.5%. This implies that the level of healthful school environment is moderate in Southwest Nigeria which means that there is need for government, stakeholders and health-educators to support the move to improve the physical environment in the various schools in southwest Nigeria. Most schools will not have the resources to address all the environmental health issues that might be identified at once. A health-promoting school should enable pupils, parents, teachers and community members to work together to make positive decision that will improve their physical environment.

Table 2: Percentage Score of Academic Performance of School Pupils in Southwest Nigeria

| YEAR | ENROLMENT | PASS | | FAIL | |
|--------------|-----------|--------|-------|-------|------|
| | | N | % | N | % |
| 2010 | 128530 | 114692 | 89.2 | 13838 | 10.8 |
| 2011 | 126023 | 109414 | 86.8 | 16609 | 13.2 |
| 2012 | 127575 | 114341 | 89.6 | 13234 | 10.4 |
| TOTAL | 382128 | 338447 | 88.6% | 43681 | 11.4 |

Source: State Ministry of Education, Examination and Record Department

Table 2 showed the level of academic performance of primary six pupils in the placement examination from primary six to JSS1 for 2010-2012 as obtained from the state ministry of education examination and records department of the three states sampled in Southwest Nigeria (Ondo, Ekiti and Osun). The analysis of the result is presented below.

To measure the level of academic performance of school pupils, the result of placement examination from primary six to Jss1 were computed as shown in table 2. The overall result showed that out of 382128 pupils that sat for the examination 338447 passed with a percentage of 88.6% while overall failure for the three years was 43681 pupils making a percentage of 11.4%. This showed that the level of academic performance of primary school pupils in the placement examination from primary six to Jss1 in Southwest Nigeria is high.

Question 3:

There is no significant relationship between healthful school environment and academic performance of school pupils. Scores on healthful school environment and weighted scores in academic performance of school pupils were subjected to statistical analysis, using Pearson Product Moment Correlation at 0.05 level of significance. The result is as presented in Table 3

Hence there is need for skills-based health education along with school health services and a health-supportive school environment to complement and reinforce existing policies, thereby improving healthful school environment.

Table 3: Relationship between healthful school environment and academic performance of school pupils

| Variable | N | Mean | r _{cal} | R _{table} |
|------------------------------|------|------|------------------|--------------------|
| Healthful School Environment | 1006 | 2.86 | 0.447 | 0.195 |
| Academic Performance | 1006 | 1.86 | | |

P<0.05

The data on Table 3 showed that r_{cal}(0.477) is greater than r_{table}(0.195) at 0.05 level of significance. The null hypothesis is rejected. It implies that there is a significant relationship between healthful school environment and academic performance of primary school pupils.

Discussion

The study has examined the influence of healthful school environment on academic performance of primary school pupils in Southwest Nigeria. The results showed that level of healthful school environment was moderate in Southwest Nigeria as shown in table 1. This is in line with the findings of Kolbe who posited that for a school environment to motivate pupils to learn, it must be attractive and encourages good teaching, permits and protects the health of the entire members of the school community.

Table 2 revealed that 382,128 pupils sat for the placement examination, 338447 passed to score 88.6% while 43681 making a percentage of 11.4 failed. This implies that the level of academic performance in Southwest primary schools in Nigeria is high. This was supported by Okafor (2001) who discovered that effective healthful school environment could contribute maximally to academic performance of school pupils. The findings also revealed that there was a significant relationship between healthful school environment and academic performance of school pupils as shown in table 2.

Healthful school environment cannot be isolated from the education of the child with regards to academic performance in the school (Ekeh 2001).healthful school environment is another important aspect of the school health programme with emphasis on provision of healthful living in the school community that favours effective teaching – learning process. This aspect of the school health programme concerns itself with the protection and improvement of conditions of the school environment, that influences students in one way or the other especially the conditions of the building (light, air, sanitation and sitting arrangements, teacher-pupils, teacher-teacher, pupil-pupil relationship).

The results for the hypothesis went in the expected direction and also in consonance with the previous research which clearly indicated that healthful school environment had significant relationship with academic performance of primary school pupils. This findings agreed with the view of Adegun(2000) who discovered that a conducive school environment sited on a plain ground not near the road and free from noise and air pollution with well-ventilated classrooms and seats well-arranged would go a long way in influencing pupils academic performance.

Skill-based health education that would increase awareness of environmental threats to health generates a feeling of responsibility for health and environment and improve the health of pupils. School pupils should also be informed about how to avoid health risk and how to create an environment that is conducive to healthy living.

Conclusion and Recommendations

It was concluded that the influence of healthful school environment on academic performance cannot be over-emphasized. This is due to the fact that the physical and aesthetic surroundings, the psychosocial climate and culture of the school could affect the wellbeing of pupils and staff thereby enhancing better academic performance. Therefore,

state government, health educators, school administrators, headmasters, curriculum planners, stakeholders, agencies and international organizations should ensure that adequate classrooms that are well sited, not overcrowded to avoid the spread of communicable diseases are available for pupils and staff.

Collaboration between education and health officials, the school health team, the community advisory committee and other school and community members is necessary to identify knowledge, attitude, behaviours, skills and services pupils need to acquire to protect themselves from illness and hazards associated with the physical environment at school or in the communities and to improve environmental conditions that affect them. In educating pupils about their physical environment, practical information that will enable pupils to reduce their exposure to unhealthy environments should be emphasized.

All teachers should serve as role models for their pupils by demonstrating responsible classroom management practices. Adequate ventilation, effective cleaning with non-toxic cleansing products disposing waste properly and recycling classroom material should be promoted for healthy school environment. Environmental and personal hygiene should be stressed to ensure a healthy school environment conducive for learning and better academic performance.

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