

MANAGEMENT OF PHYSICAL FACILITIES FOR HEALTHY AND SAFETY OF STAFF AND STUDENTS IN SECONDARY SCHOOLS IN IMO STATE

BY

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Abstract

This study examined the management of physical facilities for healthy and safety of staff and students in secondary schools in Imo State. To guide the study, two research questions were raised and one hypothesis was formulated. Descriptive survey design was used for the study. The population of the study is 8,699, from the 247 public secondary schools in Imo State which comprised 247 principals and 8,452 teachers. A sample size of 1,739 respondents was drawn using the stratified random sampling technique, which represents about 20% of the population. A self-developed questionnaire and an observation schedule were used to collect data from the respondents. The instruments were validated and reliability was ascertained using test re-test method, with Pearson's Product Moment Correlation, which gave the index as 0.76 while z-test was used to test the hypothesis of no significant difference. The findings revealed unhealthy and unsafe nature of the buildings, overcrowded and un-conducive classrooms, unhygienic toilets, hazardous furniture, among others. Based on the findings, the researcher recommended among others that healthier and safer school facilities could be maintained through collective commitment to safety compliance by principals, teachers and students.

Keywords: facilities, health and safety, staff and students, management.

INTRODUCTION

In the history of formal education in Nigeria particularly at the secondary level, there is no time as auspicious as this to discuss issues of safety and health aspects of its management. Hitherto, educational managers have largely concentrated their efforts towards the provision of inputs into the system, their processing and outputs in concert with existing policies. School safety and health have not been managerially prominent because they are before now taken for granted. Today it is no longer so! Tangentially, horizontally and vertically, there is a managerial paradigm shift in education in Nigeria as a response to the unprecedented yet unintended and undesirable negative school environmental changes.

Physical facilities must as a matter of fact be able to satisfy municipal needs such as water, light, drive ways, walk ways as well as free of pollution, noise and vehicular hazards. There should also be satisfactory adherence to teacher-students ratio, students-classroom ratio, students-toilets ratio, sufficient acreage of land, appropriate class sizes ($9 \times 12 \times 3\text{m}$) for 40 students, big enough assembly hall that can sit twice the total school enrolment, functional library and clinic, counselling centre, sporting and games field (one 1.5 hectre football field and one for other games, at least 3000m^2 farmland/fish farm, professionally registered graduate teachers, TRCN registration, teaching 18-24 periods per week (at the secondary school level). The school must have a C of O and be fenced. It should have fire-fighting equipment and must be up-to-date with statutory and non-statutory records, e.g. admission, attendance, log, visitors, movement books etc.

Safety refers to preventive measures that are being taken to control and minimise those things that can cause accidents and affect one's mental, social, psychological and physical well-being. When the human resource in a school system is exposed to dangerous learning facilities, achieving the educational objectives will be a mirage. Armstrong (2012) maintains that health and safety deals with the promotion and protection of the good condition of an employee and other people in an organisation against any hazards that may occur within the environment. Hence, in the school organisation, health and safety management is concerned with ensuring the safety of the human and material resources (administrators, teaching and non-teaching staff, students, and physical facilities). Safe, well-organised and conducive learning environment have a way of instilling discipline and safety practices in students. A school where maintenance culture is practised would promote discipline. For instance, a classroom that has broken windows and louvers gives room for unruly behaviour like; jumping through the window, cheating and side conversations among students. The restless ones can help to damage them more and use them as weapons against others.

Healthy and safety of staff and students means when they are not under any threat whatsoever and health is a state of well-being. If your health and safety are guaranteed, then there will be no threat to your well-being. Aiming for high standards of safety and health is the right thing to do by every school administrator. Achieving and proving excellence in the way of safety and with risks have massive benefits for educational institutions (Johnson, 2012). There must be a managerial committee to deal with the provision of certain things that are absent in the school. Provision may be made for water and a generating set which can cater for water modern day technology for computer and other things. All of these require skillful management. Harnessing the resources of school that guarantee absence of threat to well being of teachers, students as their learning is essential. In the management of safety and health in schools, we do not have excellent circumstances, the desire of every school

administrator is to create an acceptable condition because of the effect of these on teaching and learning. For an academic environment, the physical and social environment must strive to guarantee that both teachers and students are emotionally stable and learning reveals truth and not indoctrination as revealed in holy books.

Physical facilities are very vital inputs to the educational system; their state of condition may facilitate or impede learning. Asiyai (2012) defines school facilities as the entire school plant which school administrators, teachers and students harness, allocate and utilize for the smooth and efficient management of any educational institution, for the main objective of bringing about effective and purposeful teaching and learning experience. School facilities include: buildings, grounds, classrooms, halls, laboratories, workshops, staff rooms, offices, hostels, toilets, water, electricity, school buses, furniture, learning equipment, among others. United Nations Educational, Scientific and Cultural Organisation (UNESCO, 1985) as cited in Alabi (2013) highlighted educational facilities to include: school location, school size, area per space, school buildings, classroom accommodation, furniture, libraries, dining areas, laboratories, play- ground, illumination, ventilation, aesthetic, thermal comfort, sport facilities, toilet facilities and acoustic. Kpee (2013) also outlines educational facilities to include: the road networks, trees and flowers, chemicals, specimens, books and all forms of prints and non-print materials, school farms and farming tools. Agabi (2004) succinctly classifies physical facilities based on their functions. They are: instructional, health care, recreational, residential and general purpose facilities. Suffice it to say, examples of physical facilities are inexhaustible. They encompass every physical materials that enhances effective teaching and learning. Maduagwu and Nwogu (2006) postulate that aesthetic and healthy school environment has positive implications on the learners. However, quality and standard of a school depend largely on the effective management of these educational facilities.

Again, Adaralegbe (1983) as cited in Asiyai (2012) also opines that many classrooms are under unhygienic conditions; while some schools have no ceiling, some have no doors and windows and some classroom floors had not been concreted; thereby, leaving the students to inhale dust. The furniture and equipment were also not repaired and buildings not regularly renovated. Alabi (2013) warns that to ignore descent structures and facilities would be to overlook academic excellence. Akinsolu (2004) asserts that educational curriculum cannot be sound and well operated with unsafe and poorly managed school facilities. Most rural school environment are highly unsafe. It has been reported severally that students are usually bitten by snakes, stung by scorpions in the over-grown lawns during Break time.

Ensuring a safe and healthy school environment is sacrosanct for the realization of its educational objectives. But a critical visit to most public secondary schools in Imo State could reveal that in terms of safe and healthiness, the primary schools could be

in better shape compared with it. In some places, one could notice that there are secondary schools without fenced walls, no security guard considering the social vices of kidnapping and terrorism, bushes in and around the school premises, poor water and light systems etc. This situation could be blamed on poor safe and healthy management practices of the school administrators or partly on the government negligence. If the schools are left in these conditions without adequate managerial practices, the realization of the secondary education objectives will be in jeopardy. This situation calls for an urgent attention of the worth of the practices of school safety and healthy management, so as to proffer a suitable solution to it.

Purpose of this study: Main is to examine the management physical facilities for healthy and safety of staff and students in secondary schools in Imo State.

Specifically;

1. Ascertain the percentage of availability of healthy and safety physical facilities in secondary schools in Imo State.
2. Determine the extent to which school administrators promote healthy & safety physical facilities in secondary schools in Imo state.

RESEARCH QUESTIONS

1. What percentage are the healthy and safety physical facilities available in secondary schools in Imo State?
2. To what extent do the school administrators promote health and safety physical facilities in secondary schools in Imo State?

HYPOTHESIS

1. There is no significant difference between the mean scores of principals and teachers on the extent the school administrators promote health and safety physical facilities in secondary schools in Imo State.

The researcher used descriptive survey design with a population of 8699, comprises of 247 principals and 8,452 teachers from the 247 public secondary schools in Imo State. A stratified random sampling technique was used to draw 49 principals and 1,690 teachers which represent 20% of the population. A self-developed questionnaire and a checklist were instruments used to collect data from the respondents. The questionnaire was entitled: "Health and Safety Management of Physical Facilities (HSMPF)." The checklist was used to rate healthy and safety practices in the schools. The instruments were duly validated and reliability of the questionnaire was tested using test re-test method, calculated with Pearson's Product Moment Correlation, which yielded an index of 0.76. The study employed frequency counts, percentage, mean, standard deviation and rank order scores to provide answers to the research questions while z-test was used to test the hypothesis of no significant difference. In analysing the observation schedule, available is given 2 points while not available is

given 1 point. Any response that is converted to percentage that is above average acceptable percent of 50% is considered available while below 50% is considered not available.

RESULTS

Research Question One: What percentage are the healthy and safety physical facilities available in secondary schools in Imo State?

Table 1: Frequency and Percentage of the Availability of Health and Safety Practices in Secondary Schools

S/N	Health and Safety Practices	Avail able	Perce ntage	Not Availabl e	Perce- ntage
1.	Ventilated and decongested classrooms	78	89%	10	11%
2.	Safety and caution signs	26	42%	36	58%
3.	Well-equipped Sick Bays with nurses	18	31%	40	69%
4.	School buses that are in good conditions	32	49%	33	51%
5.	Waste reduction practices	70	83%	14	17%
6.	Hygienic and sufficient urinary and toilets	30	47%	34	53%
7.	Waste bins with covers kept at strategic places including the classrooms	64	79%	17	21%
8.	Trimmed lawns that are devoid of harmful objects	22	45%	27	55%
9.	Location of school buildings in noisy-free environments	68	82%	15	18%
10.	Well-equipped first aid boxes	36	71%	15	29%
11.	Fumigated learning environments	6	12%	46	88%
12.	Protected electrical wires and appliances	66	80%	16	20%
13.	Un-cracked floors, classrooms and offices	24	39%	37	61%
14.	Safe drinking water	58	74%	20	26^
15.	Washing hand basin in classrooms and offices	84	86%	14	14%
Aggregate Percentage			907% 60%		600% 40%

Table 1 reveals that items: 1, 5, 7, 9, 12, 14 and 15 are available since they have their various percentages above the average acceptable percentage of 50% while items 2, 3,4,6,8,10,11 and 13 have their various percentage below 50%. This entails that they are not available. Grossly on the aggregate, it is shown that 60% of these items are available while 40% are not available. See Figure 1 for details.

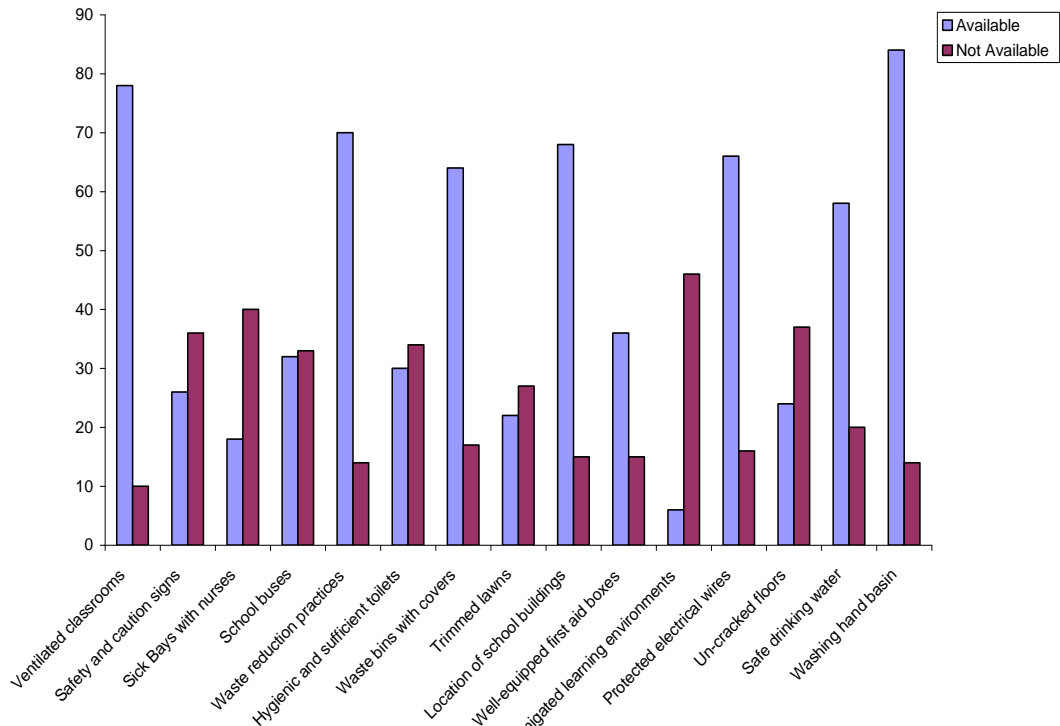


Fig. 1: Bar Chart Showing Availability of Health and Safety Practices in Secondary Schools

Research Question Two: To what extent do the school administrators promote health and safety physical facilities in secondary schools in Imo State?

Table 2: Mean Scores of Principals and Teachers on the Extent the School Administrators Promote Health and Safety Management of Physical Facilities in Secondary Schools in Imo State

S/N	Health and Safety Physical Facilities Management	Principals		Teachers		Mean Set	Rank Order	Decision
		\bar{X}	SD	\bar{X}	SD			
1.	Routine inspection, maintenance, repair, or replacement of physical facilities	2.74	1.05	2.63	0.183	2.69	4 th	Moderate
2.	Teaching Health and Safety etiquette to students and staff	3.39	0.95	3.29	0.169	3.34	2 nd	High Extent

	during assemblies, workshops, etc							
3.	Ensuring a hygienic learning environment	2.7 2	1.0 5	2.6 8	0.18	2.70	3rd	Moderate
4.	Periodic fumigation of the school compound including the farmlands	1.7 7	1.1 9	1.4 6	0.21	1.62	6th	Low
5.	Prompt attention to any student or staff who are injured or sick	3.6 2	0.9 2	3.5 5	0.16	3.59	1st	High Extent
6.	Putting up notices that indicate danger on those facilities that are unsafe	2.6 8	1.0 6	2.6 3	0.18	2.66	5th	Moderate
	Aggregate Mean	2.8 2		2.7 1		2.77		Moderate

Data in Table 2 show the mean scores of principals and teachers on the on the extent the school administrators promote health and safety management of physical facilities in secondary schools of Imo State. Both the principals and the teachers confirmed from 5 items that the school administrators promote health and safety management to an extent in the table since their mean scores are greater than the criterion mean of 2.50. However, they totally rejected item 4; hence, its mean score is less than the criterion mean of 2.50. The aggregate mean scores of 2.82 for principals and 2.71 for teachers are equally greater than the criterion mean of 2.50. Thus, the extent the school administrators promote health and safety management of physical facilities of secondary schools in Imo State include: routine inspection, maintenance, repair, or replacement of physical facilities; teaching Health and Safety etiquette to students and staff during assemblies, workshops; ensuring a hygienic learning environment, prompt attention to any student or staff who are injured or sick and putting up notices that indicate danger on those facilities that are unsafe.

TEST OF HYPOTHESIS

H₀₁: There is no significant difference between the mean scores of principals and teachers on the extent the school administrators promote health and safety management of physical facilities in secondary schools in Imo State.

Table 3: z-test of Difference between Principals and Teachers on the Extent the School Administrators Promote Health and Safety Management of Physical Facilities in Secondary Schools in Imo State

Status	N	Mean	S.D.	df	z-cal	Critical value	Decision
Principals	49	2.82	1.04	1,737	0.73	±1.96	Ho ₁ not significant (Accepted)
Teachers	1,690	2.71	0.18				

P < 0.05

Table 3 reveals that the z-test analysis of the difference between the mean scores of principals and teachers on the extent the school administrators promote health and safety management of physical facilities in secondary schools in Imo State. The result shows that z-calculated value of 0.73 is less than the critical value of ±1.96; therefore, the null hypothesis is accepted at 0.05 alpha significant level. Thus, there is no significant difference between the mean scores of principals and teachers on the extent the school administrators promote health and safety management of physical facilities of secondary schools in Imo State.

DISCUSSION OF FINDINGS

This study revealed unhealthy and unsafe nature of the public secondary schools in Imo State. Thus, this is in line with the findings of Mbakwem and Asiabaka (2007) who equally observe the unhealthy nature of the school buildings: uncompleted, old and antiquated, sometimes dilapidated buildings, overcrowded and un-conducive classrooms, unsightly and unhygienic toilets, inadequate laboratories and workshops that characterise our educational system. The findings are also in consonance with Adeogun (2008) and Asiyai (2012) who lament that physical facilities are in unsafe state and need urgent repair. The researchers also observed that most schools' compounds were bushy, have dilapidated buildings with leaking roofs, broken chairs and desks, rough floors and windows without louvers.

It also revealed that the extent the school administrators promote health and safety management of physical facilities in secondary schools in Imo State include: routine inspection, maintenance, repair, or replacement of physical facilities; teaching Health and Safety etiquette to students and staff during assemblies, workshops; ensuring a hygienic learning environment, prompt attention to any student or staff who are injured or sick and putting up notices that indicate danger on those facilities that are unsafe. However, this is in contrary to the findings of Asiyai (2012) who laments on the inadequacy of maintenance activities carried out on school facilities by school administrators in Delta State. The findings nevertheless agree with Kpee (2013), Udoh and Akpa as cited in Abraham (2003) and Lackney and Picus, (2005) who postulate that the school must provide learning environments that are safe, comfortable,

assessable, well-ventilated, adequate sanitary facilities, play grounds that are devoid of sharp and harmful objects, well-illuminated and aesthetically attractive. Furthermore, the findings also revealed that the school administrators hardly fumigate their learning environments, which is in contradiction to the suggestion of Lacney and Picus (2005). Akinsolu (2004) corroborates with the assertion that educational curriculum cannot be sound and well operated in an unsafe and an unhealthy environment.

CONCLUSION

From the findings, teaching and learning in Nigeria is currently facing tremendous safety and health challenges. Since education is an instrument for national development and secondary education is the foundation of educational activities in Nigeria, it is reasonable to inculcate and secure safety and health habits in the citizenry starting from the very early stage in life and surely this will help in ameliorating the existing safety and health challenges.

RECOMMENDATIONS

1. Government should provide funds to facilitate safety and health seminars/workshops that will create safety and health consciousness among members of the school system.
2. Heads of secondary schools should look for alternative sources of income to enhance the repair and maintenance of school facilities.
3. Government, non-governmental organizations and the host community should as a matter of urgency collaborate to provide perimeter fencing in all secondary schools in the state.

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