

Management of Health and Safety Resources for Primary Education Delivery in Port Harcourt Metropolis of Rivers State

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Abstract: This study investigated management of health and safety resources for primary education delivery in Port Harcourt Metropolis of Rivers State. Three research questions and three hypotheses guided the study. The study adopted descriptive survey research design. The total population for this study was 1,335 school administrators and teachers consisting of 114 school administrators and 1221 teachers from 114 public primary schools in Port Harcourt Metropolis. The sample size totaled 310 school administrators and teachers which comprised of 270 teachers and 40 school administrators; selected through Taro Yamane's formula and simple random sampling technique. An instrument titled: "Management of Health and Safety Resources for Primary Education Delivery Questionnaire" was used for data collection. The instrument was validated by two experts in Measurement and Evaluation and Department of Educational Management while Cronbach Alpha statistics was used to achieve reliability indexes of 0.81, 0.79 and 0.80. Mean and standard deviation were used to answer the research questions while the null hypotheses were tested using z-test at 0.05 level of significance. The findings of the study revealed that to a high extent school safety and health resources are available, utilized and audited for effective public primary education delivery in Port Harcourt Metropolis of Rivers State unlike in other states in Nigeria. Findings also showed no significant difference between the mean ratings of administrators and teachers on the extent school safety and health facilities and human resources are available, utilized and audited for effective public primary education delivery in Port Harcourt Metropolis of Rivers State. Based on the findings, it was recommended among others that the Senior Secondary Schools Board should provide adequate and appropriate safety and health facilities in primary schools to guarantee the health and safety of pupils and staff.

Keywords: Health and Safety Facilities, Availability, Utilization, Auditing, Primary Education

Introduction

Primary education is the care and education given to young pupils at the beginning of their legal school years, usually between ages 6-11 years plus; as stipulated in the National Policy on Education (Saeed, 2018). It is the first stage and compulsory level of education which is the foundation of education, whereby pupils are prepared for post primary and tertiary education. The primary education is also defined as the first six years of the nine years of basic education based on the Universal Basic Education (UBE) structure. The National Policy on Education (NPE, 2013) refers to it as education given in an educational institution to pupils prior to their entering secondary school. Primary education provides pupils with a basic understanding of various subjects as well as the skills they will use throughout their lives (Nakpodia, 2011).

The objectives of primary education as enshrined in the National Policy of Education (FRN, 2014) are to: inculcate permanent literacy, numeracy and the ability to communicate effectively; lay a sound basis for scientific, critical and reflective thinking; promote patriotism, fairness, understanding and national unity, instill social, moral norms and values in the child; develop in the child the ability to adapt to the changing environment, and provide opportunities for the child to develop life manipulative skills that will enable the child function effectively in the society within the limits of the child's capacity. In order to achieve these objectives especially laying a sound basis for scientific, critical and reflective thinking, subjects such as Basic Science, Basic Technology, Home Economics and Agriculture are taught at this level of education. Specialist teachers who are engaged at this level of education are required by the National Policy on Education (FRN, 2013) to take to modes of teaching that are participatory, exploratory, experimental and child-centered. These modes of instruction for pupils could be hazardous, reasons for which management of health and safety resources for effective primary education delivery should be given premium for the survival of pupils to the next level of education.

Over the years educators, proprietors and their clients have observed that pupils in primary schools are prone to so much outdoor and indoor leisure activities which make them sometimes sustain injuries that would need first aid treatment before referral to a hospital. These incidences are inevitable in primary schools due to

the boisterous nature of the age bracket of pupils where they play and interact so much with friends and classmates. This calls for a need of health and safety measures in primary schools.

Safety plays an important role in primary schools and as such needs an ethical framework to legalise its relevance especially in the 21st century schools. Safety is defined as a state in which hazards and conditions leading to physical, psychological or material harm are controlled in order to preserve the health and well-being of individuals and the community (Raamazan, Arzu & Ismail, 2016). According to Umberson and Montez (2010), it is an essential resource for everyday life, needed by individuals and communities to realize their aspirations.

Safety and health facilities and other resources constitute the major components of any educational program. In order to yield or guarantee quality output, the school environment must be clean, quiet, comfortable and healthy and also there should be appropriately trained and motivated teaching staff that are adequately supplied with the necessary facilities and equipment (Erickson, 2007). The role of safety and health facilities in schools in relationship to goal attainment cannot be over looked because it is important for successful teaching and learning. According to Ehiemator (2008), a school that does not have adequate safety and health facilities will find it difficult to achieve the goal and objectives of its programmes.

In the view of Sobri in Vasilies, Audrey and Jason (2021), management of health and safety resources and infrastructure can be interpreted as organizing activities, starting from planning needs, procurement, storage and distribution, utilization, maintenance, inventory and elimination as well as structuring land, buildings, equipment, and school furniture being appropriate and on target. Good management of health and safety resources and infrastructure is expected to create a clean, neat, and beautiful school to create pleasant conditions for both teachers and pupils to be in school. The purpose of managing schools' health and safety resources and infrastructure is to provide professional services to enhance the learning process effectively and efficiently. Management of educational health and safety resources would entail the availability, utilization and auditing of all educational resources and most effectively and efficiently. According to Imron in Nicklas (2018) the purpose of health and safety resources and infrastructure management, in general, is to provide professional services in educational health and safety resources and infrastructure in the context of effective and efficient education.

It is therefore ethically mandatory for every school management to keep their teachers and pupils safe in schools, especially when undertaking school activities. This calls for a risk management scheme to be put in place to keep pupils safe based on the nature of their school activities. School field trips that broaden pupils' horizon on various aspects of schooling should be conducted under safe and healthy conditions (UK Department for Education, 2018). This portends that pupils should be able to play freely at playgrounds and take part in sports as government and proprietors, as well as their school administrators become accountable for the health and safety of school staff and pupils in the day-to-day running of schools.

According to the World Health Organization (2013), health is a state of complete physical, psychological and social wellbeing and not merely the absence of disease or infirmity. This definition links health explicitly with wellbeing, and conceptualizes health as a human right requiring physical and social resources to achieve and maintain. Based on this definition above, it is logical to allude that health is indeed a prerogative for every child in school. Hence no child should be denied the right to a safe and healthy environment at school.

It is noteworthy that, pupils spend so much of their time in the school environment regardless of where they live in the world. Psychologically, health and learning are closely connected in the school setting, where good health and healthy practices create the optimal conditions for pupils' academic success. Consequently, poor health and unhealthy practices build tall barriers to student learning (Nicklas, 2018). In the view of Ogbuji (2013), safety and health personnel are needed to deliver school health services to school pupils in their schools. These services aim at promoting and maintaining the safety and health of school pupils so as to give them a good start in life. In addition, these services seek to enable pupils benefit optimally from their school learning experiences. School health and safety services deal with health appraisals, control of communicable diseases, record keeping and supervision of the health of school pupils and personnel. It is the aspect that concerns itself with evaluating the health and safety of an individual objectively (Champoux & Brun, 2012). Health appraisals afford the school authorities the opportunity to detect signs and symptoms of common diseases among the pupils as well as signs of emotional disturbances that could impede their learning activities. School health and safety services are both preventive and curative services and they help in providing information to parents and school personnel on the health status of school pupils. It also provides advisory and counselling services for the school community and parents.

It is however, unfortunate that despite the relevance of school health and safety, it lacks good literature support most especially with the impending Monkey-Pox disease and Omicron that had two new sub variants in November 2022 known as BQ1 and BQ 1.1. Also at the inception of 2023, a new sub variant surfaced referred to as XBB 1.5 which has been on the increase. These issues call for immediate attention by revamping the health and safety resources of primary schools with a view to protecting pupils at school. At this juncture some

pertinent questions seek for answers and they are: Can head teachers state categorically that there are enough safety and health resources to content with the rising spate of diseases associated with childhood and inevitable injuries that could be sustained in their school environments? Are school doctors and nurses available in the public primary schools? It is against this background that the current study investigated management of health and safety resources for primary education delivery in Port Harcourt Metropolis of Rivers State.

Concept of Health and Safety Resources

School health and safety resources are equipment and facilities that help to promote a safe and healthy learning environment in schools. In a school setting, health and safety resources are both human and material resources used for effective response and treatment of school pupils who are liable to health risks, such as injuries, illness, or other forms of hazards within the school environment. Hallak in Hamid (2014), identified health and safety resources as cogent factors contributing to academic achievement in the school system. They include human resources such as school nurses, school doctors, health workers, dentists, health educators and health care providers. The material resources among others include: disposable mask, thermometer, hand sanitizer and universal cleaners, emergency asthma inhaler, first aid box, antiseptic wipes, antibiotic ointment, elastic bandage, tweezer, cotton bandage, sterile gauze pads, rubber tourniquet, children's waterproof assorted plasters, antiseptic solution etcetera. It was reiterated that without adequate safety and health resources, it is extremely difficult to serve a large number of pupils with complex needs.

Availability of Health and Safety Human Resources for Primary Education Delivery

In order to achieve an effective school health service delivery, it is important that health and safety resources are available to provide health and safety services in primary schools (Centre for Disease Control and Prevention, 2018). The availability of school health facilities help to organize and effectively respond to treatment of school pupils who have been exposed to health risks, such as injuries, illness, or other forms of hazards within the school environment (Abihud, 2013). Ensuring availability of health services that meet a minimum quality standard and securing access to them are key functions of a health system (World Health Organization, 2013). According to Ali (2018), polluted air is a major challenge to pupils' cognitive and physical development. It also reiterates that where a young child is exposed to outdoor air pollution, or second-hand smoke, they are at an increased risk for pneumonia, stunted brain development, or chronic respiratory diseases such as asthma. In the long term, air pollution can increase a child's risk of cancer or stroke. Hence it is important that in a school environment where pupils spend most of their time playing and interacting, measures are taken to ensure that adequate environmental cleanliness is maintained all through the school day.

It is crucial to ensure safe and healthy school surroundings, as the school environment has a profound influence on pupils' growth and development. To provide a healthy school environment for pupils, WHO (2013) recommends improving safe water and sanitation, reducing air pollution, building safer school environments, among other actions. There is the likelihood that with a healthy start in life, pupils can gain access to basic services such as education, which contributes to improved health and enhanced quality of life (Baldock, Vickers, Small bone & James, 2015). The availability of school safety facilities help to promote a safe and healthy learning environment in schools as they positively affect health, behaviour, engagement, learning and growth in achievement (Ogbuji, 2013). Patton, Glover and Bowes (2010) noted that there is no task more important than safeguarding school environment, as the availability of school safety facilities help to promote a safe and healthy learning environment in schools. There is no doubt that the availability and provision of a safe learning environment would enhance effective primary education delivery. This is because young pupils, especially infants and toddlers explore their world so much at that age and in the process might hurt themselves unintentionally which the school must consciously prepare for before the eventualities occur. However, Ikoya and Onoyase (2018), found that 26% of secondary schools across the country lackadequate school infrastructure in quality and quantity. In the same vein Abubakar and Raji (2021), buttressedon the deplorable state of many primary schools in Nigeria as a result of governmental gross neglect. Some of their notable findings on availability and utilization of health and safety resources were of the following ranges: health personnel 3 (7.5%); school ambulance 3(7.5%); health room or sick bay 16(40%) and most schools had pit toilets 27(67.5%). First aid boxes were available in the schools under study 38(95.5%). However, 17(40.0%) of the schools had iodine and all the schools used open dumping as a waste disposal measure. Sanni, Airede, Anigilaje and Offiong (2022), in an independent study found that 95(65.1%)had no health personnel, sick bay nor ambulance. Generally, school health services were said to be inadequate. It was therefore recommended that provision of sufficient human resources and facilities be made for public primary schools. This scenario infers that the public primary schools under study were unsafe and unhealthy thus serving as breeding grounds for communicable and non communicable diseases. In the light of the above Agwu (2012), above opined that early childhood service providers can ensure safety for young pupils by creating a safe and supervised environment.

Utilization of Health and Safety Material Resources for Primary Education Delivery

The optimum utilization of equipment and facilities available in public primary schools is important because it translates plans and programmes into action thus enhancing school administrators to achieve set goals. School plant utilization is a measure of how well existing school plant components are used in the implementation of educational programmes in schools for optimum performance and waste minimization. School health and safety resources utilization have to do with the effective use of existing school health and safety resources in terms of frequency, capacity and function. According to Lenkokile (2016) utilization of school health and safety resources is aimed at providing learners with response treatment to school pupils who have been exposed to health risks.

School health facilities are school plant components essential for giving emergency care and other medical services to members of the school community while at school. According to Yelkperi in Kowalczyk (2018), health facilities play primary roles in fostering good sanitation, good health and developing healthy habits among staff and pupils. The administration of personnel health and well-being in primary schools could be made easier with the proper utilization of health facilities available in the school.

Auditing of Health and Safety Material and Human Resources for Primary Education Delivery

Preiser (2015), defined facility evaluation/auditing as Post-occupancy evaluation (POE) which is a diagnostic tool and system which allows facility managers to identify and evaluate critical aspects of building performance systematically. This system identifies problem areas in existing buildings, new building prototypes and to develop design guidance and criteria for future facilities. It outlines the numerous benefits of POE, including better space utilization, as well as cost and time saving measures. According to Champoux and Brun (2012) health appraisals afford the school authorities the opportunity to detect signs and symptoms of common diseases among the pupils as well as signs of emotional disturbances that could impede their learning activities. Sembe and Amos (2017) opined that school health and safety services are both preventive and curative services and they help in providing information to parents and school personnel on the health status of school pupils. Performance evaluation/audit of safety and health facilities in schools seek to determine the extent of success of availability and utilization plans for health and safety resources and to identify changes that might be necessary.

Auditing school safety facilities for primary education delivery is a cyclical and systematic review of processes, practices and outcomes of safety and healthcare services against clearly defined evidenced-based criteria. Systematic reviews are important in health care delivery especially in primary schools as they place emphasis on quality improvement in an effort to meet standards and deliver best practice care to primary school pupils. When this is done properly, it provides a robust framework to improve the health of primary school pupils significantly. This is the major reason why auditing safety and health school facilities for primary education delivery is becoming increasingly important for the achievement of educational objectives at primary school level (Griffin & Neal, 2014).

Clinical auditing is also seen as a way to find out if health care is being provided in line with standards and if it allows care providers and patients to know where a service is doing well or not and also where there is need for improvement. The aim is to highlight the discrepancies between actual practice and standard to identify the changes needed to improve the quality of care provided to the pupils. A well conducted clinical audit process will achieve the following: increase the culture of clinicians; solve a problem; reduce the variability of professional conduct; and reduce the gap between theoretical standards and real life (Hamid, Singh, Yusuf, & Yang, 2014).

Health and safety facilities in general encompass any location where healthcare is provided ranging from small clinics and doctor's offices to urgent care centers and large hospitals with elaborate emergency rooms and trauma centers (Helledi, 2011). Hospitals are the primary ultimate healthcare facilities and their services are varied greatly depending on their location and size (Ahmadi-Javid, Seyedi & Syam, 2017). This is because they have a wide range of units that save lives through emergencies, non-intensive care and intensive care. The Nigerian school health care has suffered several down-falls. Despite Nigerian's strategic position in Africa, the country is greatly underserved in the health care sphere. Health facilities (health centers, personnel, and medical equipment) tend to be inadequate in Nigeria, especially in rural areas and in the schools (Osain, 2011).

Statement of the Problem

Pupils spend so much of their time in the school environment all over the world. This is observed in their school preparation and engagement which tends to take eight (8) hours of the day out of twelve (12) hours. Most of these active hours at the primary school level need a lot of teachers' supervision over the pupils to stay free

from accidents in order to achieve the primary school objectives as stated unequivocally in the National Policy on Education, FRN (2014).

In order to achieve these objectives especially laying a sound basis for scientific, critical and reflective thinking, subjects such as Basic Science, Basic Technology, Home Economics and Agriculture are taught at this level of education where specialist teachers take to modes of teaching that are participatory, exploratory, experimental and child-centred (FRN, 2014) These modes of instruction to the pupils could be hazardous coupled with the boisterous nature of pupils that range from six (6) to eleven (11) years.

Over the years some mind boggling questions have continued to persist about health and safety management of primary schools. The questions are: Are there health and safety human resources in the public primary schools? Are there health and safety material resources in the public primary schools? To what extent are health and safety resources made available, utilized and also, how are material resources audited? In a bid to give plausible answers to these questions, the study investigated “Management of Health and Safety Resource for Primary Education Delivery in Port Harcourt Metropolis of Rivers State”.

Purpose of the Study

The purpose of this study was to investigate management of health and safety resources for primary education delivery in Port Harcourt Metropolis of Rivers State. The specific objectives were to:

1. Determine the extent availability of health and safety human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.
2. Examine the extent utilization of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.
3. Ascertain the extent auditing of health and safety material and human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Research Questions

1. To what extent does availability of health and safety human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State?
2. To what extent does utilization of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State?
3. To what extent does auditing of health and safety material and human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State?

Hypotheses

- Ho₁ There is no significant difference between the mean ratings of school administrators and teachers on the extent availability of health and safety human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.
- Ho₂ There is no significant difference between the mean ratings of school administrators and teachers on the extent utilization of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.
- Ho₃ There is no significant difference between the mean ratings of school administrators and teachers on the extent auditing of health and safety material and human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Methodology

The descriptive survey research design was adopted for the study. The population of the study was 1,335 school administrators and teachers consisting of 114 school administrators and 1221 teachers from 114 public primary schools in Port Harcourt Metropolis of Rivers State. The sample size of the study was 310 school administrators and teachers which consisted of 270 teachers and 40 school administrators drawn through Taro Yamane’s formula and simple random sampling technique. A self-developed questionnaire titled: “Management of Health and Safety Resources for Primary Education Delivery Questionnaire (MHSRPEDQ)” was used for data collection. The instrument had two (2) sections, Sections A and B. Section A consisted of demographic information while Section B contained questionnaire items based on the research questions. The response scale was structured on a 4-point Likert rating scale of Very High Extent (VHE); High Extent (HE); Low Extent (LE); and Very Low Extent (VLE) with values of 4, 3, 2 and 1 respectively. The instrument was validated by two experts in Measurement and Evaluation and Department of Educational Management. Cronbach Alpha statistics was used to test the reliability and reliability indexes of 0.81, 0.79 and 0.80 were obtained. Mean and standard deviation were used to answer the research questions, with a criterion mean of 2.50. Questionnaire items with mean values below 2.50 denoted ‘Low Extent’ while 2.50 and above signified ‘High Extent’. The hypotheses

were tested using z-test statistics at 0.05 level of significance. Analyzed data with calculated z-values above the z-critical value of ± 1.96 were rejected and below ± 1.96 were accepted.

Results

Research Question 1: To what extent does availability of health and safety human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State?

Table 1: Mean Ratings of School Administrators and Teachers on the Extent Availability of Health and Safety Human Resources Enhance Primary Education Delivery in Port Harcourt Metropolis of Rivers State.

S/No.	Items	Administrators (n = 40)			Teachers (n = 270)		
		\bar{x}	SD	Decision	\bar{x}	SD	Decision
1	Health personnel are adequately engaged for effective delivery in primary education.	2.56	0.65	HE	2.80	0.77	HE
2	There is access to emergency doctors.	2.50	0.73	HE	2.68	0.80	HE
3	Auxiliary nurses are well engaged.	2.74	0.81	HE	2.70	0.62	HE
4	Qualified nurses are engaged for effective primary education delivery.	2.72	0.74	HE	2.61	0.79	HE
5	Availability of well-trained first aid givers are engaged.	2.80	0.90	HE	2.85	0.81	HE
Grand Scores		2.66	0.77	HE	2.73	0.76	HE

Source: Field Survey June, 2022

The result on Table 1 revealed that questionnaire items (1-5) which had mean values of 2.56, 2.50, 2.74, 2.72 and 2.80 for school administrators and 2.80, 2.68, 2.70, 2.61 and 2.85 for teachers were rated to be above the criterion mean of 2.50. This implied that health and safety human resources were to a high extent available to enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Research Question 2: To what extent does utilization of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State?

Table 2: Mean Ratings of School Administrators and Teachers on the Extent Utilization of Health and Safety Material Resources Enhance Primary Education Delivery in Port Harcourt Metropolis of Rivers State.

S/N	Items	Administrators (n = 40)			Teachers (n = 270)		
		\bar{x}	SD	Decision	\bar{x}	SD	Decision
6	Disposable mask helps to protect oneself from hurts.	3.06	0.84	HE	2.87	0.76	HE
7	Thermometers are adequately utilized for checking body temperature of pupils from time to time for prompt attention.	3.12	0.78	HE	3.10	0.93	HE
8	Hand sanitizers and universal cleaners are used to keep pupils safe from germs and contamination.	2.99	0.83	HE	2.82	0.81	HE
9	First Aid Manual /Guide help to stabilize an injury before proper treatment is made available to pupils.	2.97	0.92	HE	2.93	0.79	HE
10	Antiseptic wipes are used to clean up dirt and kill germs.	3.18	0.85	HE	2.80	0.83	HE
11	Antibiotic ointment is used for the treatment of infected wounds of any severity, purulent-inflammatory diseases of soft tissues and skin.	3.56	0.93	VHE	3.62	0.93	VHE
12	Antiseptic solution (Hydrogen Peroxide) is used to kill microorganisms on the skin and mucous membranes as first aids to pupils.	3.26	0.98	HE	2.90	0.95	HE
13	Antacid Tablets are used to treat symptoms of excess stomach acid among pupils.	3.78	1.12	VHE	3.88	1.04	VHE

14	Paracetamol Tablets are used to treat fever and mild to moderate pain among pupils.	2.94	0.87	HE	2.72	0.87	HE
15	Butterfly wound closures are used to close small cuts and wounds before pupils are referred to hospitals.	3.69	1.01	VHE	3.64	1.00	VHE
16	B2k Antiseptic Towelletes are preservatives in contact lens solutions used as ingredient in antimicrobial soaps and as skin antiseptics.	2.58	1.04	HE	2.62	0.97	HE
17	Conforming gauze roll is used to bind wounds in awkward places or wounds that cover a large surface area.	3.32	0.80	HE	3.21	0.89	HE
18	Cotton tipped applicators are used for medication application, wound treatment, specimen collection and more.	2.89	1.11	HE	2.95	1.10	HE
19	CPR Face shield are used during cardiopulmonary resuscitation procedures, in emergencies to supply oxygen and produce blood flow in the heart and lungs.	2.97	0.85	HE	2.90	0.89	HE
20	Finger Splints/Tongue Depressors are used for anything from a slight sprain to a broken bone.	2.78	1.02	HE	2.88	1.06	HE
21	First Aid Burn Cream Packets are used to reduce pain while preventing infection of burns, cuts & scrapes.	2.58	1.04	HE	2.70	1.27	HE
22	Hand Sanitizer Packets in liquid, gel or foam form are generally used to kill many viruses/bacteria/microorganisms on the hands	3.04	1.20	HE	3.21	0.91	HE
23	Scissors are used for cutting various thin materials, such as bandages and plaster to support sprains, bruises and cuts.	2.67	1.01	HE	2.95	1.15	HE
Grand Scores		2.77	0.84	HE	2.71	0.82	HE

Source: Field Survey June, 2022

Result on Table 2 revealed that questionnaire items (6-23) had mean values of 3.06, 3.12, 2.99, 2.97, 3.18, 3.56, 3.26, 3.78, 2.94, 3.69, 2.58, 3.32, 2.89, 2.97, 2.78, 2.58, 3.04 and 2.67 for school administrators and 2.87, 3.10, 2.82, 2.93, 2.80, 3.62, 2.90, 3.88, 2.72, 3.64, 2.62, 3.21, 2.95, 2.90, 2.88, 2.70, 3.21 and 2.87 for teachers. These mean values were above the criterion mean of 2.50. This implied that utilization of health and safety material resources to a high extent enhanced primary education delivery in Port Harcourt Metropolis of Rivers State.

Research Question 3: To what extent does auditing of health and safety material and human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State?

Table 3: Mean Ratings of School Administrators and Teachers on the Extent Auditing of Health and Safety Material and Human Resources Enhance Primary Education Delivery in Port Harcourt Metropolis of Rivers State.

S/No.	Items	Administrators (n = 40)			Teachers (n = 270)		
		\bar{x}	SD	Decision	\bar{x}	SD	Decision
24	School safety audits identify risks in the primary schools.	3.06	0.84	HE	2.87	0.76	HE
25	School health audits ascertain the number of health facilities.	3.12	0.78	HE	3.10	0.93	HE
26	It ascertains the quality of health facilities in primary schools.	2.99	0.83	HE	2.82	0.81	HE
27	Audit of school health facility is used to determine the level of government funding provided to that facility.	2.97	0.92	HE	2.93	0.79	HE

28	School health audit takes into account the proportion of health services rendered for effective primary education delivery.	3.18	0.85	HE	2.80	0.83	HE
29	School health audits ascertain the number of school doctors.	3.56	0.93	VHE	3.62	0.93	VHE
30	School health and safety audits ascertain the number of school nurses in my school.	3.26	0.98	HE	2.90	0.95	HE
31	It ascertains the quality of health and safety material resources in the school.	3.78	1.12	VHE	3.88	1.04	VHE
32	Audit of school health and safety resources attract attention to adequate funding of public primary schools.	2.94	0.87	HE	2.72	0.87	HE
33	It evaluates the process of planning, procurement/obtainment and utilization of material and school health and safety personnel for primary education delivery.	3.69	1.01	VHE	3.64	1.00	VHE
34	School health and safety audits ascertain the number of health resources in my school.	2.58	1.04	HE	2.62	0.97	HE
Grand Scores		3.19	0.92	HE	3.08	0.90	HE

Source: Field Survey June, 2022

The result on Table 3 revealed that questionnaire items (24-34) which had mean values of 3.60, 3.12, 2.99, 2.97, 3.18, 3.56, 3.26, 3.78, 2.94, 3.69 and 2.58 for school administrators and 2.87, 3.10, 2.82, 2.93, 2.80, 3.62, 2.90, 3.88, 2.72, 3.64 and 2.62 for teachers were above the criterion mean of 2.50. This denotes that auditing of health and safety material resources to a high extent enhanced primary education delivery in Port Harcourt Metropolis of Rivers State.

Hypotheses

Ho₁ There is no significant difference between the mean ratings of school administrators and teachers on the extent availability of health and safety human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Table 4: z-test Analysis of Difference between the Mean Ratings of School Administrators and Teachers on the Extent Availability of Health and Safety Human Resources Enhance Primary Education Delivery in Port Harcourt Metropolis of Rivers State

Respondents	N	X̄	SD	A	DF	z-cal.	z-crit.	Decision
Administrators	40	2.66	0.77	0.05	308	0.92	±1.96	Ho ₁ Accepted
Teachers	270	2.73	0.76					Not Significant

Source: Field Survey June, 2022

Data on Table 4 shows a z-calculated value of 0.92, which was less than the z-critical value of ±1.96 at 0.05 level of significance and 308 degree of freedom. Since the z-calculated value of 0.92 was less than the z-critical value of ±1.96, the null hypothesis was accepted which states that there is no significant difference between the mean ratings of school administrators and teachers on the extent availability of health and safety human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Ho₂ There is no significant difference between the mean ratings of school administrators and teachers on the extent utilization of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Table 5: z-test Analysis of Difference between the Mean Ratings of School Administrators and Teachers on the Extent Utilization of Health and Safety Material Resources Enhance Primary Education Delivery in Port Harcourt Metropolis of Rivers State

Respondents	N	X̄	SD	A	DF	z-cal.	z-crit.	Decision
Administrators	40	2.77	0.84	0.05	308	0.88	±1.96	Ho ₁ Accepted
Teachers	270	2.71	0.82					Not Significant

Data on Table 5 shows a z-calculated value of 0.88, which was less than the z-critical value of ± 1.96 at 0.05 level of significance and 308 degree of freedom. Since the z-calculated value of 0.88 was less than the z-critical value of ± 1.96 , the null hypothesis was accepted which states that there is no significant difference between the mean ratings of school administrators and teachers on the extent utilization of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Ho₃ There is no significant difference between the mean ratings of school administrators and teachers on the extent auditing of health and safety material resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Table 6: z-test Analysis of Difference between the Mean Ratings of School Administrators and Teachers on the Extent Auditing of Health and Safety Material and Human Resources Enhance Primary Education Delivery in Port Harcourt Metropolis of Rivers State

Respondents	N	\bar{X}	SD	A	DF	z-cal.	z-crit.	Decision
Administrators	40	3.19	0.92	0.05	308	0.91	± 1.96	Ho ₁ Accepted
Teachers	270	3.08	0.90					Not Significant

Source: Field Survey June, 2022

Data on Table 6 shows a z-calculated value of 0.91, which was less than the z-critical value of ± 1.96 at 0.05 level of significance and 308 degree of freedom. Since the z-calculated value of 0.88 was less than the z-critical value of ± 1.96 , the null hypothesis was accepted which states that there is no significant difference between the mean ratings of school administrators and teachers on the extent auditing of health and safety material and human resources enhance primary education delivery in Port Harcourt Metropolis of Rivers State.

Discussion of Findings

Findings on Research Question 1 on Table 1 revealed that availability of health and safety human resources to a high extent enhanced primary education delivery in Port Harcourt Metropolis of Rivers State with grand mean values of 2.66 and 2.73. Hypothesis 1 on Table 4 also showed no significant difference between the mean ratings of school administrators and teachers on the extent availability of health and safety human resources enhanced primary education delivery in Port Harcourt Metropolis of Rivers State with z-calculated value of 0.92 which was less than z-critical value of ± 1.96 . The finding is in tandem with Ogbuji (2013), who asserted that without adequate safety and health resources, it is extremely difficult to serve a large number of pupils with complex needs. Also research findings of Abubakar and Raji (2016) and Sanni, Airede, Anigilaje and Offiong (2022), acknowledged presence of health and safety human resources in primary schools which enhanced primary school delivery; although in inadequate quantity.

Findings on Research Question 2 on Table 2 revealed that utilization of health and safety material resources to a high extent enhanced primary education delivery in Port Harcourt Metropolis of Rivers State with grand mean values of 2.77 and 2.71. Hypothesis 2 on Table 5 showed no significant difference between the mean ratings of school administrators and teachers on the extent utilization of health and safety material resources enhanced primary education delivery in Port Harcourt Metropolis of Rivers State with z-calculated value of 0.88 which was less than z-critical value of ± 1.96 . This finding corroborates with Chandan (2019) who asserted that for effective teaching to take place in any educational setting there must be provision of adequate and quality physical facilities.

Findings on Research Question 3 on Table 3 revealed that auditing of health and safety material and human resources to a high extent enhanced primary education delivery in Port Harcourt Metropolis of Rivers State with grand mean values of 3.19 and 3.08. Hypothesis 3 on Table 6 showed no significant difference between the mean ratings of school administrators and teachers on the extent auditing of health and safety material and human resources enhanced primary education delivery in Port Harcourt Metropolis of Rivers State with z-calculated value of 0.91 which was less than z-critical value of ± 1.96 . This finding is in tandem with Champoux and Brun (2012) who found that health appraisals afford the school authorities the opportunity to detect signs and symptoms of common diseases among the pupils as well as signs of emotional disturbances that could impede their learning activities. Also in support of the research findings, Sembe and Amos (2017) opined that school health and safety services are both preventive and curative services which help in providing information to parents and school personnel on the health status of school pupils for better academic success.

Conclusion

Based on the findings of the study, it was concluded that the availability of health and safety human resources, utilization of material resources and auditing of material and human resources enhanced primary education delivery in Port Harcourt Metropolis of Rivers State.

Recommendation

Based on the findings the following recommendations were made:

1. Safety and health human resources should be employed by the government and posted to every public primary school to administer responsive treatment to pupils who are exposed to health risk due to their age and boisterous nature so that they can perform well academically.
2. The school management should ensure that health and safety material resources are utilized to guarantee the safety of pupils and ensure effective primary education delivery.
3. School health and safety material and human resources should be audited regularly to ascertain who is responsible for carrying out risk assessments, implementing recommended measures, and carrying out periodic reviews and assessments.

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