SCHOOL SAFETY MANAGEMENT FOR EFFECTIVE SERVICE DELIVERY IN PUBLIC SECONDARY SCHOOLS IN DELTA STATE

BY

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Abstract

The paper investigated school safety management for effective service delivery in public secondary schools in Delta State. Three research questions were answered and three hypotheses tested in the study. Descriptive survey design was adopted in the study while population of the study comprised all the 466 public senior secondary school principals in Delta State out of which 444 available principals (238 males and 206 females) were purposively sampled. School Safety Management for Effective Service Delivery Questionnaire (SSMESDQ) was the instrument used for data gathering. The questionnaire was face and content validated by two Measurement and Evaluation experts at the University of Port Harcourt with a reliability index of 0.81 using Cronbach alpha statistics. There were 444 copies of the questionnaire administered and 412 copies retrieved which was a return rate of 92.8%. Mean, standard deviation and rank order statistics were used to answer the research questions while z-test statistics was used to test the hypotheses at 0.05 level of significance. Findings of the study indicated that loss of lives and property as well as injuries were some of the effects of unsafe school. The barriers to adequate safety in the schools that were identified were lack of safety awareness, absence of safety staff among others. Strategies for improved safety such as engagement of safety experts were also identified. It was recommended that principals should be trained on how to handle internal safety issues in the school for better service delivery.

Keywords: Safety, Effective, School, Service Delivery, Delta State

Introduction

The safety of students, school personnel and school plants should be highly prioritized as a safe and secure school environment brings about effective teaching and learning. This is achievable through enactment of viable legislative policies to manage safety of human and material resources for the realization of educational objectives in the school. Provision of safety facilities in the school is a catalyst to the realization of the objectives of the school. Ugwulashi (2016) pointed out that schools differ in terms of size, facilities and programmes and this also creates a difference in how they handle safety issues which also affects the overall administration of the school. In recent times, there had been a major concern of educational stakeholders and members of the public, on the level of poor provision and management of safety facilities in the public secondary schools with particular reference to the Delta state secondary schools. A critical look at most public secondary schools in Delta state, reveal unsafe acts and conditions such as, overgrown bushes, poor sanitary system, unfenced school compounds, open classrooms, blown off roofs, obsolete facilities/equipment and dilapidated buildings due to poor safety culture. All these pose serious threat to the safety of students and school personnel and as such, hamper effective teaching and learning processes in the school.

The school environment cannot be totally devoid of hazards as they are part of every system and this may vary from one school to another depending on the level of safety orientation, consciousness and practices in the school. Unfortunately, as identified by Onyekachi and Siabee (2022), some schools neglect the issue of health and safety and this is responsible for different degrees of harm and damages in some schools. These hazards may emanate from several unsafe acts and conditions which have the likelihood of causing various forms of threats to lives and properties. The resultant effect may lead to injuries or even fatality if they are not properly managed. One of the ways to manage such is by strict adherence to school safety regulations as one thing is to enact safety policies and another is to make sure those policies are obeyed in order to guarantee safety of lives and properties in the school. Research has shown that accidents in the school are mostly caused by unsafe acts and conditions. They are acts usually contrary to norms, rules and regulations, or accepted standard practices and procedures; which can generally be regarded as illegal acts. Managing safety in the school therefore is the comprehensive approach adapted by school management to reducing the

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risk of injury to educational personnel, students and visitors on the school premises and school plant. It is concerned with the planning and management of safety policies or programmes with the view to achieving desired goals of academic excellence of the school system.

There is no doubt that when the school is unsafe, it become very difficult for any academic or administrative activity to take place and this can jeopardize the attainment of outlined educational goals and objectives. Similarly, despite the existence of several safety threat in majority of public secondary schools in the State, no effort has been taken to address this danger signs which may have devastating effects if allowed to degenerate. Omolo and Simatwa (2010) pointed out that while some schools are overcrowded by about 70%, necessary safety facilities such as fire extinguishers is available in less than 30% of these schools and this poses a lot of health hazards.

In most of the school environments, there is lots of non-desirable outcomes which if not properly managed can pose serious threat to the safety of students and school personnel which can impede the achievement of the educational goals. Such non-desirable outcomes as cracked walls, dilapidated buildings, unfenced school compounds, leaking roofs, faulty electrical connections, overcrowded classrooms, internet facility hazards and job insecurity. Maslow in Peretomode (2012) postulated that there are safety needs in the school organization. This safety needs include security, protection against danger and accident, threat, and protection from physical or psychological harm, deprivation economic disaster, and the unexpected. It also includes the desire for stability and absence from pain and illness and of course job security. To him, these needs begin to emerge and dominate behavior if they are not adequately satisfied. In essence, the achievement of the safety needs affects performance behaviour in service delivery in the school. The level of safety need attainment determines to a large extent the level of quality service delivery. For adequate safety to be achieved in any organization, every personnel in such organization must participate actively in the management of safety of that organization in order to achieve its expected goals; as it is popularly said, safety is everybody's business and this was exactly the position of Khomola (2012) who asserted that the school management team alone cannot do without partnership with parents and other stakeholders in making the school safe and healthy and no school should shy away from such partnership for quality service delivery.

Effective service delivery can only be realized if adequate measures are adopted by school administrators or management to enhance the safety of staff a students and material resources of the school (Khomola, 2012). This is based on the fact that a school that is unsafe cannot attain high level of educational excellence. Effective service delivery in this sense is the achievement of positive educational objectives, producing the expected results, teaching and learning outcomes and positive school performance. We can therefore say that the level of effective service delivery in the school is a function of the safety of the school human and material resources.

Accidents in the school are mainly caused by unsafe acts and conditions in the school environment; but identifying their causes and eliminating them no doubt prevent their future occurrences. Uncontrolled unsafe acts and conditions in the school pose serious danger to lives and effective management of school plants. According to Katie et al., (2012), schools need to be safety conscious and safety ready. Unsafe acts and conditions have the possibility of causing minor accidents, major accidents and sometimes fatality. When this occurs, the reputation of the school could be damaged if not well managed and this has economic implication to the school. Hence, it is the role of the school administrators, staff and students to identify and eliminate all forms of unsafe acts and conditions so as to guarantee quality education delivery in the school. Unsafe acts are sometimes taken by people without due consideration for personal safety, the safety of other people around which affects job performance negatively. They are usually actions that are contrary to established rules and regulations or acceptable standard practices in an organization. Unsafe acts can also be seen as performance of tasks or activities in a manner that may pose threat to the safety of workers and other people around. The school environment is highly associated with unsafe acts and conditions. These includes behaviours such as administrative flaws, professional misconducts, assault, bullying, theft, fights, victimization, cultism, use of weapons, alcohol, drug abuse, adoption and other vices. These acts and

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conditions constitute hazards which impede effective teaching and learning in secondary schools. There have been reported cases of truancy and absenteeism of students and teachers and other cases of professional misconducts amongst school personnel (Igwe, 2010). Cases of sexual harassment of female students by male teachers, and in some cases impregnating them, thereby hindering them from achieving their dreams. These amongst others create negative image for safety management in secondary schools. It is evident that in many public secondary schools, students are found with different weapons like knives, guns, axes and dangerous chemicals to commit crimes. These crops of students constitute the majority of school dropout rates and constituting nuisance later in the society. A good example is the repentant of secondary school aged cultists as militants in Delta State during the Federal Government Amnesty Programmes, and many of the insurgent militant groups are in this circle.

Unsafe conditions are existing conditions in an environment that have the potential of causing accidents or damage to property if they are not corrected. They are seen as work place conditions or equipment and materials conditions that can cause accidents. Accidents can happen in the school which will involve people, machines, materials, chemicals and environment and this can affect the sustainability of teaching and learning. The prevalence of unsafe acts and conditions in the school has the potential of inflicting serious safety challenges in the school environment. Nevertheless, the rate of accidents, injuries and fatality in the school can be reduced, when the school staff and students comply with available safety policies. Education priorities in secondary schools are mainly focused on academic achievement and as such, issues of safety are given less or no attention. They are considered less vital aspect of education and at sometimes handled with all triviality and laissez-faire altitude from the policy making stage down the principals' administrative role. Based on this, safety in secondary schools lacks appropriate rules and regulations in the form of educational and governmental policy such that safety effectiveness is relatively dependent on the geographical location of schools and school management initiative. Safety is paramount in the achievement of educational goals, however realizing this is faced with many constraints with far reaching aspect of effective management implications. There are many management barriers needing attention in secondary schools in order to implement and focus on safety for the attainment of academic excellence. To manage safety effectively in secondary schools, considerable financial implications are involved. School management rather spends on other tangible school needs such as staff training and retraining or academic development programmes rather than to spend on safety related issues in the school. Also, the intangible nature of risk management and effective school safety contribute to the financial burden and as such, government prefers to spend on more tangible things with conspicuous achievement.

Effective safety management in the school requires adequate training and professional development of administrators, principals, teachers and students, as this will help them recognize and respond to the issues of safety promptly. Investigation has shown that this is lacking in our schools as government is more concerned on training staff on academic development rather than safety related issues. Safety awareness is a very important aspect of management in schools as one cannot give what he/she does not have. So, in order to manage safety effectively in secondary schools, there must be adequate orientation for teachers, staff, students and other stakeholders in the school. They should be taught the safe use of equipment in the school such as laboratory equipment, fire extinguishers, journey management, etc., as this will help to reduce the rate of incidence and accidents in the school. In summary, Srichai et al., (2013) noted that mManagement barriers to effective safety in schools included time, finance, leadership culture, commitment, communication and understanding from stakeholders and all of these must be dealt with for the school to make progress.

To develop good strategies for effective safety management in the school, the leadership style adopted by the administrator plays significant role. In fact, everyone in the school must be safety conscious and safety responsible (Johnson et al. 2018). A viable and healthy leadership style to motivate all personnel involved in the school system is indispensable. The school administrator as a leader must be committed to making sure that all stakeholders in the school are compelled to adhering to the safety rules and policies on ground. In the case of absence of the policies, they ensure that one (safety policies) is put in place to ensure the safety of lives and property in the school. This can only be possible if the leader (school administrator) is well informed about such policies. Communication is an important aspect of school management; communicating

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safety issues in the school will no doubt help to create a safe school environment. This should be done using appropriate management strategies to ensure the concept of safety is not misunderstood, but an accomplishment of its importance to all the school and her various stakeholders. Research has shown that there are few or no effective safety rules and regulations (schools' safety policy) in most of our public secondary schools. As a result of this, school administrators, teachers and students indulge in unsafe practices which most of the times, lead to accidents causing injuries or fatality. They often times do not realize the degree of havoc they are wrecking by their unsafe acts and when such acts lead to injuries and most times fatality, they are left unpunished.

A safe school is a guarantee and one of the indicators of effective teaching and learning. This is achievable if appropriate precautionary and disciplinary measures are put in place to follow in order to implement safety policies in the school. It is an important obligation for every school management to ensure the safety of students, personnel and visitors in the school. The deplorable state of our secondary schools calls for appropriate safety measure in order to achieve qualitative service delivery in the school. This implies that every stakeholder must contribute their quota towards the attainment of the goals and objectives of the school. Based on this, some key strategies can be adopted to improve the safety management and help enhance effective service delivery in the schools as poor safety management can impede educational activities in the school. There are various strategies that can be adopted and practiced to improve effective safety management in schools as suggested by Igwe, Giweze and Onwugbuta (2016). These strategies include but are not limited to the following; To ensure safety in the school, adequate rules and regulations are of prime importance hence; there should be safety management policies in form of code and conducts to manage safety related issues in the school. These policies will help to safeguard the lives of students, staff, properties and the school environment. It is the primary responsibility of school administrators to draw a safety management programme as part of safety statement needed in the school. All stakeholders need to understand the requirements and objectives of these policies in order to appreciate the benefits that accrue from them by effectively committing to them. This will help improve safety operations of school activities and enhance effective service delivery of staff and other personnel in the school.

For safety measures to be to inculcated and implemented appropriately in the school, the staff should be trained and retrained on how to carry out such measures effectively. Training and developing teachers on safety policy implementation in our secondary schools will provide adequate knowledge and confidence for the teachers to teach students safety education. More so, it will equip staff with the skills to responding to emergencies such as the use of fire extinguishers, practice basic medic first aid, etc. When it comes to training and development, teachers and students can collaborate to create a safe an enabling environment for effective safety culture. Risk assessment strategy is also important. This is a process of identifying risks in the workplace and taking reasonable measures to control them to the barest minimum. It is one of the measures of managing safety in order to protect personnel and students from harm in the school and it is required by law to carry it out. It is the responsibility of the administrator or principal to carry out adequate risk assessment on schools' facilities and all the activities going on in the school. This can be done through a systematic routine inspection of school building and equipment to check if they are in good conditions in accordance with safety rules and good effective communication will help to get it right.

Researchers have carried out several studies to investigate how the management of safety practices affect service delivery across different levels of education. Osuji and Omah (2019) conducted a study on safety management practices for quality public senior secondary schools administration in Rivers State which was guided by three research questions and corresponding hypotheses by adopting a descriptive survey design. Population of the study was 1200 principals and teachers out of which 200 principals and teachers were sampled using random sampling technique. Instrument applied for collection of data was questionnaire titled "Safety Management Practices for Quality Public Senior Secondary Schools Administration" (SMPQPSSSA) with a test re-test reliability index of 0.78. Mean and standard deviation statistics were used to answer the research questions while the hypotheses were tested at 0.05 level of significance using z-test statistics. Result of the study indicated that there was significant difference between safety management practices for quality public senior secondary school's administration in Rivers sate.

Zablon et al., (2014) investigated the implementation of safety standards and guidelines in public secondary schools in Marani District, Kisii County, Kenya. Descriptive survey design was adopted in the study with a population of 28 public secondary schools in Marani District from which stratified, purposive and simple random sampling was used to draw 49 teachers as sampled respondents for the study. Findings of the study were that safety standards and guidelines had not been fully implemented majorly due to inadequate funds and inadequate supervision.

Salahudeen et al., (2018) also conducted a study on the effect of school safety on students' academic performance in public secondary school students in Lagos State, Nigeria. There were 100 teachers and school administrators who were randomly selected from these schools. Questionnaire was used to collect data for the study which was analyzed using simple percentage and non-parametric statistics of chi-square. Result of the study indicated that public schools do not have effective safety facilities and equipment to take prompt remedial actions when necessary. The study also indicated that security and discipline rules perceived by teachers and students were not strictly enforced in most public schools in Lagos State. Anthony et al., (2022) also carried out a study to find out if learners' school security and safety measures impact on learners' academic performance. Findings of the study revealed that unsafe school is more likely to result in students who have emotional problems, particularly direct victims of violence or bullying. Mubita (2016) investigated the barriers to effective safety and health management at Sefula secondary school in Western Zambia. The study adopted a case study research design while purposive sampling technique was used to sample the 15 management officers in the school who were administered interview for data collection. The study showed that poor funding, poor safety culture, absence of training on safety and health issues were major challenges to safety and health management in the school.

Diaz-Vicario (2017) also investigated practices that promote comprehensive school safety. Qualitative approach was adopted in the study as such interview was administered to 9 sampled educational institutions stakeholders in the study area. Result of the study indicated that educational institutions develop various activities in order to promote school safety, but many of them are performed only because they are required by regulations, without any sensitivity and real commitment to their need or importance. Nyabuti (2018) also investigated the strategies for implementing safety policies in secondary schools in Kenya. Mixed design was adopted in the study used while 18 National schools were purposively selected for the study and stratified random sampling was used to select 6 schools. The sampled respondents in these schools was 436 comprising 6 head teachers, 120 class teachers, 300 students, 6 watchmen, and 4 Quality Assurance and Standards Officers. Questionnaires, Interview and observation schedules were used for data collection and analyzed using descriptive statistics. Result of the study showed that the National Secondary Schools had minimal knowledge of strategies for implementation of safety policies with minimal safety awareness, and variations in attitude among teachers and students.

Aim and Objectives of the Study

The aim of the study was to investigate school safety management for effective service delivery in public secondary schools in Delta State. In specific terms, the objectives of the study were to:

- 1. examine the effects of unsafe school environment on service delivery in public secondary schools in Delta State.
- describe the barriers to school safety management for effective service delivery in public secondary schools in Delta State.
- 3. determine the strategies for improved safety management for effective service delivery in public secondary schools in Delta State.

Research Ouestions

The following research questions were raised to guide the study:

- 1. What are the effects of unsafe school environment on service delivery in public secondary schools in Delta State?
- 2. What are the barriers to school safety management for effective service delivery in public secondary schools in Delta State?

3. What are the strategies for improved safety management for effective service delivery in public secondary schools in Delta State?

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

- 1. There is no significant difference between the mean scores of male and female principals on the effects of unsafe school environment on service delivery in public secondary schools in Delta State.
- 2. There is no significant difference between the mean scores of male and female principals on the barriers to school safety management for effective service delivery in public secondary schools in Delta State.
- 3. There is no significant difference between the mean scores of male and female principals on the strategies for improved safety management for effective service delivery in public secondary schools in Delta State.

Methodology

The study adopted descriptive survey design. The population of the study was all the 466 public senior secondary school principals in the 25 Local Government Areas of Delta State out of which 444 principals (238 males and 206 females) who were available as at the time of this study were sampled for the study though purposive sampling technique. Instrument used for data collection of data was a 22 item questionnaire titled "School Safety Management for Effective Service Delivery Questionnaire (SSMESDQ). The questionnaire was responded to on a four point modified Likert scale with of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1 respectively. The instrument was face and content validated by two Measurement and Evaluation experts at the University of Port Harcourt. The reliability of the questionnaire was estimated using Cronbach alpha statistics and it produced an average index of 0.81 which implied that the instrument was reliable. There were 444 copies of the questionnaire administered by the researcher and three (3) other research assistants that were properly guided for the exercise had a return rate of 92.8% (412 copies retrieved (214 males and 198 females)). Mean, standard deviation and rank order statistics were used for answering the research questions while z-test statistics was used to test the hypotheses at 0.05 level of significance.

Results Answer to Research Questions

Research Question One: What are the effects of unsafe school environment on service delivery in public secondary schools in Delta State?

Table 1: Mean, standard deviation and rank order on the effects of unsafe school environment on service delivery in public secondary schools in Delta State

S/N	Questionnaire Items	Male Principals (n ₁ =214)		Female Principals (n ₂ =198)		Mean Set	Rank	Decision
		\overline{x}_1	S_1	\overline{x}_1	S_1	$\frac{\overline{(x_1+x_2)}}{2}$		
1	Unsafe acts/conditions can lead to fatality (loss of life)	2.808	0.927	2.546	0.937	2.677	6th	Agreed
2	Accidents are caused by unsafe acts/conditions	2.743	0.971	2.758	0.879	2.750	4th	Agreed
3	Unsafe acts/conditions is capable of damaging school image	2.879	0.847	2.742	0.929	2.810	3rd	Agreed
4	Injuries could be caused by unsafe acts & conditions	2.794	0.885	2.854	0.909	2.824	2nd	Agreed
5	Unsafe acts/conditions disrupt	2.701	0.858	2.561	0.898	2.631	8th	Agreed

6	teaching & learning Unsafe acts/conditions leads to waste of resources	2.654	0.879	2.677	0.882	2.666 7 th	Agreed
7	Unsafe acts/conditions can lead to health hazards	2.925	0.796	2.849	0.927	2.887 1st	Agreed
8	Quality education delivery can be reduced by unsafe acts/conditions	2.701	0.966	2.748	0.911	2.724 5th	Agreed
	Grand Total	2.776	0.891	2.717	0.909	2.746	Agreed

The data from table 1 showed the mean scores of both male and female principals on the effects of unsafe acts and conditions in public senior secondary schools in Delta State. The respondents agreed to all the items with high mean scores greater than the criterion mean score of 2.50 implying that all the listed items were effects of unsafe school environment. The grand total mean scores of 2.776 for male and 2.717 for female principals and the aggregate mean score of 2.746 for both principals showed that they agreed to all the items. Therefore, unsafe acts/conditions can lead to fatality (loss of life), causes accidents, capable of damaging school image, and inflicting injuries. Unsafe acts/conditions disrupt teaching & learning and could lead to waste of resources; it equally could cause health hazards and consequently reduces quality education delivery.

Research Question Two: What are the barriers to school safety management for effective service delivery in public secondary schools in Delta State?

Table 2: Mean, standard deviation and rank order on the barriers to school safety management for effective service delivery in public secondary schools in Delta State

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S/N	5/N Questionnaire Items		Male Principals (n ₁ =214)		Female Principals $(n_2=198)$		Rank	Decisio
		$\overset{-}{x}_1$	S_1	$\overset{-}{x}_1$	S_1	$(x_1 + x_2)$		n
						2		
9	Inadequate school funding	2.911	0.897	2.692	0.956	2.802	7th	Agreed
10	Lack of professional safety staff	2.790	0.958	3.010	1.013	2.900	4th	Agreed
11	Lack of safety awareness	2.869	1.012	2.859	0.982	2.864	5th	Agreed
12	Lack of comprehensive safety policies	2.991	0.959	3.035	0.979	3.013	2^{nd}	Agreed
13	Non-effectiveness in the enforcement of safety policies	2.902	0.957	2.778	0.935	2.840	6th	Agreed
14	Non-assessment and utilization of safety facilities	2.981	1.052	3.096	1.006	3.039	1 st	Agreed
15	Lack of safety monitoring team	3.070	0.959	2.823	1.005	2.947	3rd	Agreed
	Grand Total	2.931	0.971	2.899	0.982	2.915		Agreed

The data from table 2 indicated the mean scores of both male and female principals on the barriers to effective school safety management in public secondary schools in Delta State. The respondents agreed to all the items with high mean scores greater than the criterion mean score of 2.50. All the items listed were agreed as barriers to adequate safety implementation in the selected schools. The grand total mean scores of 2.931 for male and 2.899 for female principals and the aggregate mean score of 2.915 for both principals showed that they agreed to all the items. Therefore, barriers to effective school safety management in the public secondary schools include: Inadequate school funding, lack of professional safety staff, lack of safety awareness, lack of comprehensive safety policies, non-effectiveness in the enforcement of safety policies and lack of safety monitoring team.

Research Question Three: What are the strategies for improved safety management for effective service delivery in public secondary schools in Delta State?

Table 3: Mean, standard deviation and rank order on the strategies for improved safety management for effective service delivery in public secondary schools in Delta State

101 61	fective service delivery in public se							
			ale	Fen		Total		
		Principals		Principals			Rank	
S/N	Questionnaire Items	$(n_1=214)$		$(n_2=198)$				Decisio
		$\overset{-}{x_1}$	S_1	$\overset{-}{x}_1$	S_1	$(x_1 + x_2)$		n
		-	•	-	•	2		
						2		
16	Viable school safety policies	2.766	1.044	3.005	1.050	2.886	8 th	Agreed
10	promote safety management	2., 00	1.0	2.002	1.000	2.000	Ü	1181000
17	Adherence to safety policies by	3.075	1.018	2.985	0.974	3.030	1^{st}	Agreed
1,	both staff and students	5.075	1.010	2.708	0.57	2.020	•	1151000
18	Regular training & retraining of	3.033	1.027	2.879	1.069	2.956	4^{th}	Agreed
10	staff/students on school safety	5.055	1.027	2.079	1.007	2.550	•	1151000
19	Routine supervision on the use of	2.851	0.986	2.980	0.992	2.915	7^{th}	Agreed
1)	school facilities	2.031	0.700	2.700	0.772	2.713	,	Agreed
20	Regular maintenance of school	2.991	0.979	3.046	1.044	3.018	2^{nd}	Agreed
20	plant	2.771	0.717	3.040	1.044	5.010	2	Agreed
21	•	2.855	0.999	3.116	0.993	2.986	3 rd	Agraad
21	Effective communication/report	2.633	0.999	5.110	0.993	2.980	3	Agreed
22	of incidence	2.011	0.077	2.055	0.057	2.022	6 th	A 1
22	Effective risk assessment in the	2.911	0.977	2.955	0.957	2.933	6	Agreed
	school promotes safety							
	management							_
	Grand Total	2.926	1.004	2.995	1.011	2.961		Agreed

The table 3 indicated the mean scores of both male and female principals on the strategies to promoting effective safety barriers to effective safety management in public secondary schools in Delta State. The respondents agreed to all the items with mean scores greater than the criterion mean score of 2.50. The items listed were agreed as strategies that can be adopted to improve the safety of the investigated schools. The grand total mean scores of 2.926 for male and 2.995 for female principals and the total aggregate mean score of 2.960 for both principals showed that they agreed to all the items. Therefore, the strategies that could be adapted to promoting effective safety management in Public Secondary Schools include the following: viable school safety policies strategy, adherence to safety policies strategy, regular staff/students safety training and retraining strategy, routine inspection on the use of school facilities strategy, regular maintenance of school plant strategy, effective communication/report of incidence strategy and effective risk assessment in the school strategy.

Test of Hypotheses

Hypothesis One: There is no significant difference between the mean scores of male and female principals on the effects of unsafe school environment on service delivery in public secondary schools in Delta State.

Table 4: z-test analysis of difference between the mean scores of male and female principals on the effects of unsafe school environment on service delivery in public secondary schools in Delta State

Variable	n	Means	Standard Deviation	df	z-cal.	z-crit.	Decision
Male Principals		2.776	0.895				Retained
	214			410	0.67	0.509	
Female Females	198	2.717	0.914				

Table 4 indicated that z-cal. value of 0.67 was less than the z-crit. value of 1.96 at 410 degrees of freedom and 0.05 level of significance and as such the null hypothesis was retained indicating that there was no significant difference between the mean scores of male and female principals on the effects of unsafe school environment on service delivery in public secondary schools in Delta State.

Hypothesis Two: There is no significant difference between the mean scores of male and female principals on the barriers to school safety management for effective service delivery in public secondary schools in Delta State.

Table 5: z-test analysis of difference between the mean scores of male and female principals on the barriers to school safety management for effective service delivery in public secondary schools in Delta State

Variable	n	Means	Standard Deviation	df	z-cal.	z-crit.	Decision
Male Principals		2.776	0.895				Retained
	214			410	0.33	0.509	
Female Females	198	2.717	0.914				

Table 5 showed that z-cal. value of 0.33 was less than the z-crit. value of 1.96 at 410 degrees of freedom and 0.05 level of significance and as such the null hypothesis was retained indicating that there was no significant difference between the mean scores of male and female principals on the barriers to school safety management for effective service delivery in public secondary schools in Delta State.

Hypothesis Three: There is no significant difference between the mean scores of male and female principals on the strategies for improved safety management for effective service delivery in public secondary schools in Delta State.

Table 6: z-test analysis of difference between the mean scores of male and female principals on the strategies for improved safety management for effective service delivery in public secondary schools in Delta state

Delta state							
Variable	n	Means	Standard Deviation	df	z-cal.	z-crit.	Decision
Male Principals		2.776	0.895				Retained
	214			410	0.69	0.509	
Female Females	198	2.717	0.914				

Table 6 revealed that z-cal. value of 0.69 was less than the z-crit. value of 1.96 at 410 degrees of freedom and 0.05 level of significance and as such the null hypothesis was retained implying that there was no significant difference between the mean scores of male and female principals on the strategies for improved safety management for effective service delivery in public secondary schools in Delta State.

Discussion of Findings

Responses from the principals sampled for the study revealed the effects of unsafe acts/conditions and revealed that unsafe acts/conditions could lead to fatality (loss of life), is capable of damaging school image, disrupt teaching and learning, leads to waste of resources, health hazards and reduces quality education delivery in public senior secondary schools in Delta State. Major and minor accidents are mainly caused by unsafe acts and conditions in the school environment; unsafe acts and conditions have the possibility of disrupting teaching and learning and sometimes lead to fatality in the highest order. When this occurs, the reputation of the school could be damaged if not well managed and this has economic implications to the school. Hence, it is the role of the school administrators, staff and students to identify and eliminate all forms of unsafe acts and conditions so as to guarantee quality education delivery in the school. The study by Salahudeen et al., (2018) went further to reveal in the result of their study that when these effects are left unresolved, it could lead to discipline and break down of order in the school.

The school environment is highly associated with unsafe acts and conditions. These includes behaviours such as administrative flaws, professional misconducts, assault, bullying, theft, fights, victimization, cultism, use of weapons, alcohol, drug abuse, adoption and other vices. These acts and conditions constitute hazards which impede effective teaching and learning in secondary schools. The test on hypothesis also showed that there was no significant difference between the mean scores of male and female principals on the effects of unsafe acts and conditions in public secondary schools in Delta State. This finding however differ from the outcome of the study conducted by Osuji and Omah (2019) which reported that there was significant difference between safety management practices for quality public senior secondary school's administration in Rivers State which suggests that schools may have different approaches of dealing with safety issues.

The result of the study also revealed that inadequate school funding, lack of professional safety staff, lack of safety awareness, lack of comprehensive safety policies, non-effectiveness in the enforcement of safety policies, non-assessment and utilization of safety facilities and lack of safety monitoring team were seen to be the barriers to school safety. This result agreed with the findings of the study conducted by Mubita (2016) which showed that poor funding, poor safety culture, absence of training on safety and health issues were major challenges to safety and health management in the school and hence substantiated this finding. This result is in agreement with the outcome of the study conducted by Nyabuti (2018) which also established that schools had minimal knowledge of strategies for implementation of safety policies with minimal safety awareness, and variations in attitude among teachers and students among other militating factors

Lack of safety professionalism and safety awareness in the school has also been a barrier to school safety. This situation may persist because study by Diaz-Vicario (2017) indicated that there is actually no commitment from most schools on safety issues and this may explain why these barriers persists. The test on hypothesis indicated that there was no significant difference between the mean scores of male and female principals on the barriers to effective school safety management in public secondary schools in Delta State. Responses from the principals sampled for the study also established that viable school safety policies, adherence to safety policies by both staff and students, regular training and retraining of staff/students on school safety, routine supervision on the use of school facilities, regular maintenance of school plant, effective communication/report of incidence, effective risk assessment can assist the school deliver quality services if properly enforced. This result agrees with the outcome of a similar study by Anthony et al., (2022) which also established that students can do better academically if adequate safety strategies are put in place by the school. Every organization or school is determined to lay down policy framework that is to be vigorously pursued with an aim of increasing productivity and minimizing losses in a safe working environment in the school. Such policies, legislations, rules and regulations are the focal point on which the school goals/safety are anchored upon. It is not enough for teachers or professional safety staff to be employed in the school, but it is pertinent for both the teachers and the students to be regularly trained and retrained most especially on the contemporary trend on safety management for them to remain effective and efficient in their operational mode. Zablon et al., (2014) in their study agree with this finding as they revealed that the school can be more safety inclined if relevant stakeholders are trained and supervised. The test of hypothesis also indicated that there was no significant difference between the mean scores of male and female principals on the strategies for promoting effective school safety and these strategies can assist schools deliver meaningful services if properly enforced.

Conclusion

The study concluded based on the results that lack of safety in schools have several negative effects on students, teachers and other stakeholders in the school. It This may however be due to a plethora of barriers which included funding challenges, lack of safety awareness, absence of safety staff in the schools among others and all of these can affect the ability of the school to deliver quality services and no difference existed in the opinion of the male and female principals on these findings.

Recommendations

Based on the findings the following recommendations were made:

1. There should be adequate provision of modern safety facilities in the school by the government as this will to help arrest the incidences that can lead to harm and danger in the schools.

- 2. The principals should acquire professional safety skills and ensure that the students and teachers are fully oriented on all safety rules and regulations in the school.
- 3. There should be employment of professional safety staff in every school to help educate and ensures compliance to school safety policy across all units, departments and sections of the school environment.
- 4. The school management should develop safety policy and ensures commitment to its compliance for the improved service delivery in the school.

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