Educational Facilities: Appropriate Strategy for School Safety Management in Rivers State, Nigeria

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Abstract
This paper is a descriptive study to examining educational facilities in public schools as strategy for school safety management in Rivers State, Nigeria. This was carried out among the 245 Public Senior Secondary Schools. There were 2 research questions and 2 hypotheses formulated with 6 item questionnaire based on four-point Likert scale drawn and administered for collection of data. Mean and standard deviation was used to analyze the research questions while z-statistics was used to test the hypotheses. The findings indicate that there is (i) no significant difference between the mean scores of male principals and female principals (ii) no significant difference between the mean scores of urban principals and rural Principals on ways hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria. The recommendations include the need for provision and maintenance of existing facilities, risk analysis of facilities, school inspections and audits, adequate funding, training of school administrators, managers and personnel amongst others.

Keywords: Educational Facilities, Public Schools, Strategy, School Safety Management

Introduction
All over the world, even the most advanced countries there will be no meaningful teaching and learning in a condition of lack of educational facilities. Educational facilities comprise of infrastructure and instructional facilities in the school. These assist in effective and efficient teaching and learning process. The promotion of positive secured academic environment hinges on availability of safe educational facilities. Good educational facilities motivate teaching and learning appropriately than in unsafe conditions of damaged, lack or nonexistent educational facilities. Poor facilities are initiating structures for primary hazard sources affecting educational activities. These hazards arising from educational facilities call for continuous audit of entire school facility system. School safety audits help to understand potential hazards and risks waiting to result to incidents. Hazards need to be identified, assessed, mitigated and or curbed for achievement of quality teaching and learning environment.

Provision of school facilities is imperative, but maintenance of these facilities is an important condition to improving good academic environment. These facilities contribute to school safety, quality teaching and learning, high staff and student academic performances, and behavioral changes towards school activities. Good educational facilities stimulate active staff and students’ involvement in teaching and learning processes. They avail opportunity of easy
recreational and safe extracurricular performances. A well-equipped school with educational facilities is a good structure for quality education service delivery. It encourages studiousness in pursuit of the curriculum; eliminates behavioural hazards (truancy) on staff and learners thus, promote joy in the academic environment. That is, proper condition for human capital development.

Even at this, the problem of educational facilities today is enormous to include poor funding, and lack of maintenance culture (Idu, 2004) that schools now look like worn-out museums. Every school has its taste of this problem probably the poor financing of education sector coupled with persistent corruption in the entire national system. Although, a thought provoking issue self-evident world over is the explosion of school population rate, which increasingly involved extra cost for management of schools, regular procurement of new facilities and or frequent maintenance of existing facilities. School population increase inflates the issue of mismanagement of school resources. This has been one deceptive argument posed to exonerating the systemic problem of corruption, undermining that school resources have never been appropriately deployed to required purposes in public schools. To say the least, modern school facilities have eluded my schools due to poor system of educational resource management.

Another contributory factor is the non-continuity approach in governance system. Each successive government likes to initiate its own projects abandoning ongoing projects. There is great need for more expansion and upgrading of educational facilities to accommodate completely the increasing school population in a safe manner in this 21st century for quality education service delivery. Obviously, an increase in official school population must be met with increased facilities provision despite the outcry of dwindling economy. And increase in facilities must be met with better-quality school staffing approach. It is not fascinating that successive governments have not really find concrete solutions on these conditions public schools operate, thus breeding truant behaviours due to lack of facilities. There should be provision of good infrastructure, instructional facilities and staff strength facilities to safely reassure the performance of every public school.

Educational facilities determine the ability of a school to cope with its curricular and extracurricular tasks, control behaviours and initiating serenity in the academic environment. Educational facilities to be a strategy for school safety management must adhere to the four stage approach proposed by Abdulkareem and Fasasi (2012) which includes provision, utilization, maintenance and improvement of educational facilities. These conditions are necessary to accomplishing school safety management since good educational facilities support hazard free school environment.

Importantly, for school quality assurance to be in place, school facilities are necessary requirement and need to be adequately provided, utilized, maintained and improved upon to facilitating proper teaching and learning. They must “fit for use or purpose” meeting standard requirement (Ugwulashi, 2011) promoting safe teaching and learning process. This clear evidence of poor educational facilities prompted Okorie (2002) in (Agabi & Okorie, 2002) to assert that the classroom, and indeed the entire school environment is pervaded with potential hazards and dangers, which are often over looked by teachers and other school personnel. It becomes questionable whether school administrators and managers know the importance of safety to the school and what remedial actions have been to contain it. The worries today in the
school system are these numerous unsafe conditions posed by the deteriorating infrastructure and instructional facilities. In reality most schools have not met the minimum safety standard that will amply ensure sustainable safe setting for proper academic activities as enunciated in the National School Health Policy (FME, 2006).

However schools cannot exist without infrastructure and instructional facilities which are part of the standard provisions for the establishment. Picus (n.d) notes that an effective school facility is responsive to the changing programs of educational delivery, and at a minimum should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated, and aesthetically pleasing. He further asserts that depending on the quality of its design and management, the facility can contribute to a sense of ownership, safety and security, personalization and control, privacy as well as sociality, and spaciousness or crowdedness. Truly these conditions invariably are not met today, evidently due to poor safety school awareness and tiny funding status as many may claim.

Obviously, the exact quality educational facilities must meet to be fit for use as appropriate to enhancing carrying out activities in school without harm. On the contrary, schools today do not meet this condition thereby disparagingly made mockery of the entire educational system. Nowadays, educational facilities are neither procured nor the existing ones maintained to meet safety standard to be in place. Scholastic propositions supports that educational facilities affect school academic and administrative performance (Abraham, 2002 cited in Agabi, et.al. 2002; Ajayi & Ayodele., 2011) to mention but a few. This study looks at curbing educational facilities hazards as Strategy for School Safety Management of Public Schools in Rivers State, Nigeria.

Statement of the Problem
Educational facilities found everywhere in schools do not meet standard requirements. They are below safety limits for effective school operations. This deficiency has absolutely made it difficult in face of increasing population and fast developing technologies to achieving school quality service delivery. Many educational facilities in school today are sources of hazards (dilapidated structures, classrooms, desks, chairs, tables, blackboards, beds, shelves, and windows) to mention but a few. The problem of this study therefore: is ways hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria.

Aims and Objectives of the Study
The aim of this study was to investigate ways hazards arising from educational facilities can be curbed as Strategy for School Safety Management in Rivers State, Nigeria. It predominantly looks at
(i) rating of male and female principals perceptions on hazards arising from educational facilities.
(ii) rating of urban and rural school principals perceptions on hazards arising from educational facilities.

Research Questions
1. In what ways can hazards arising from educational facilities be curbed as strategy for School Safety Management in Rivers State, Nigeria?
2. In what ways can hazards arising from educational facilities in rural and urban schools be curbed as strategy for School Safety Management in Rivers State, Nigeria?

**Hypotheses**

Ho1. There is no significant difference between the mean ratings of male principals and female principals on ways hazards arising from educational facilities can be curbed as strategy for School Safety Management in Rivers State, Nigeria.

Ho2. There is no significant difference between the mean ratings of urban principals and rural principals on ways hazards arising from educational facilities can be curbed as strategy for School Safety Management in Rivers State, Nigeria.

**Research Design**

This study adopts descriptive survey method with population of two hundred and forty five (245) Public Senior Secondary Schools in Rivers State. Sample size of 45 Public Senior Secondary Schools was selected using proportionate stratified random sampling. The 45 Public Senior Secondary Schools became the respondents comprising 30 Male Principals and 15 Female Principals selected through simple random sampling technique.

The structured questionnaire titled: School Safety Climate Educational Facilities Questionnaire (SSCEFQ) was introduced to collect data to describe and generalize the group directly involved and to test the null hypotheses and draw inferences about conditions that exist in the population from the study sample. The main questionnaire contained 6 items based on modified four - point Likert type scale which was validated by research experts, and established 0.78 reliability index through test-retest method correlated scores using the Pearson Product Moment Correlation Coefficient (r). The questionnaire was administered to the principals and all completed copies (100%) collected for the analyses with one research assistant. The scores were converted into mean, standard deviation, and rank order used to analyze the research questions only. Mean score above 2.50 shows agreement while mean score below 2.50 shows disagreement. The z - test statistics was used to test the hypotheses to ascertain significant difference at 0.05 level of significance.

**Analysis of Research Questions**

**Research Question 1:** In what ways can hazards arising from educational facilities of Public Senior Secondary Schools be curbed as strategy for School Safety Management in Rivers State, Nigeria?

**Table 1:** Analysis of mean ratings and rank order on the ways hazards arising from educational facilities can be curbed as strategy for School Safety Management in Rivers State, Nigeria. The calculated mean scores ranged from 3.60 to 4.00 higher than the criterion mean score of 2.50. All the items were agreed by male and female principals of Public Senior Secondary Schools as appropriate ways to curb hazards arising from educational facilities. This includes constant inspection and audit of school facilities, participation of all Stakeholders, provision of safe infrastructure and instructional facilities; removal of damaged facilities, provision of funds for day to day administration and preventive maintenance system in place.
<table>
<thead>
<tr>
<th>S/N</th>
<th>Questionnaire items</th>
<th>Male Principals N = 30</th>
<th>Female Principals N = 15</th>
<th>Mean set</th>
<th>Rank order</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A</td>
<td>Ways hazards arising from educational facilities of Public Senior Secondary Schools can be curbed as strategy for School Safety Management in Rivers State, Nigeria.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Constant inspection /audit of school facilities</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>1st</td>
<td>Agreed</td>
</tr>
<tr>
<td>2</td>
<td>Provision of fund for day to day administration</td>
<td>3.60</td>
<td>3.73</td>
<td>3.67</td>
<td>5th</td>
<td>Agreed</td>
</tr>
<tr>
<td>3</td>
<td>Periodic maintenance system of facilities</td>
<td>3.70</td>
<td>3.60</td>
<td>3.65</td>
<td>6th</td>
<td>Agreed</td>
</tr>
<tr>
<td>4</td>
<td>Provision of safe infrastructure and instructional facilities</td>
<td>3.80</td>
<td>3.80</td>
<td>3.80</td>
<td>3rd</td>
<td>Agreed</td>
</tr>
<tr>
<td>5</td>
<td>Removal of broken facilities</td>
<td>3.85</td>
<td>3.53</td>
<td>3.69</td>
<td>4th</td>
<td>Agreed</td>
</tr>
<tr>
<td>6</td>
<td>All stakeholders participation</td>
<td>3.93</td>
<td>3.87</td>
<td>3.90</td>
<td>2nd</td>
<td>Agreed</td>
</tr>
<tr>
<td><strong>Grand Mean</strong></td>
<td></td>
<td><strong>3.81</strong></td>
<td><strong>3.76</strong></td>
<td><strong>3.79</strong></td>
<td></td>
<td><strong>Agreed</strong></td>
</tr>
</tbody>
</table>

Mean: 0.00 - 2.49 = Disagreement; 2.50 - above = Agreement

**Research Question 2:** In what ways can hazards arising from educational facilities in Rural and Urban schools be curbed as strategy for School Safety Management in Rivers State, Nigeria?

**Table 2:** Analysis of mean ratings and rank order on the ways hazards arising from educational facilities in urban principals and rural principals of public senior secondary schools can be curbed as strategy for school safety management in Rivers State, Nigeria. The calculated mean scores ranged from 3.50 to 3.95 is higher than the criterion mean score of 2.50. All the items were agreed by respondents as appropriate ways to curb hazards arising from educational facilities both in urban and rural schools. This includes constant inspection and audit of school facilities, participation of all Stakeholders, provision of safe infrastructure and instructional facilities; removal of damaged facilities, provision of funds for day to day administration and preventive maintenance system in place.
S/N | Questionnaire items | Urban Principals N = 30 | Rural Principals N = 15 | Mean Rank order | Remarks |
---|-----------------|-----------------|-----------------|-----------------|--------|
1  | Ways hazards arising from educational facilities of Public Senior Secondary Schools can be curbed as strategy for School Safety Management in Rivers State, Nigeria. | ^ | SD | 3.90 | 1.30 | 3.85 | 1.92 | 3.88 | 1<sup>st</sup> | Agreed |
2  | Provision of fund for day to day administration | | SD | 3.85 | 1.28 | 3.62 | 1.20 | 3.74 | 4<sup>th</sup> | Agreed |
3  | Periodic maintenance system of facilities | | SD | 3.50 | 1.67 | 3.70 | 1.23 | 3.60 | 6<sup>th</sup> | Agreed |
4  | Provision of safe instructional facilities | | SD | 3.76 | 1.68 | 3.65 | 1.21 | 3.80 | 3<sup>rd</sup> | Agreed |
5  | Removal of broken facilities | | SD | 3.62 | 1.81 | 3.81 | 1.90 | 3.71 | 5<sup>th</sup> | Agreed |
6  | All stakeholders participation | | SD | 3.95 | 1.31 | 3.75 | 1.25 | 3.85 | 2<sup>nd</sup> | Agreed |
**Grand Mean** | **3.76** | **1.53** | **3.73** | **1.33** | **3.75** | Agreed |

Scale: 0.00 - 2.49 = Disagreement; 2.50 - above = Agreement

**Hypothetical Testing**

**Ho1.** There is no significant difference between the mean ratings of male principals and female principals of Public Senior Secondary Schools on ways hazards arising from educational facilities can be curbed as strategy for School Safety Management in Rivers State, Nigeria.

Table 3: - Mean ($\bar{x}$), standard deviation (SD) and z-test statistic analysis between the mean ratings of male principals and female principals of public senior secondary schools on ways hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>$\bar{x}$</th>
<th>SD</th>
<th>z-Cal</th>
<th>z-Crit</th>
<th>Df</th>
<th>Level of Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Principals</td>
<td>30</td>
<td>3.81</td>
<td>1.27</td>
<td>0.107</td>
<td>1.96</td>
<td>106</td>
<td>0.05</td>
<td>Ho1 Accepted</td>
</tr>
<tr>
<td>Female Principals</td>
<td>15</td>
<td>3.76</td>
<td>1.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
principals and female principals of public senior secondary schools on ways hazards arising from educational facilities can be curbed as strategy for school management in Rivers State, Nigeria.

**Ho2.** There is no significant difference between the mean ratings of urban principals and rural principals of public senior secondary schools on ways hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria.

**Table 4:** - Mean \( \bar{x} \), standard deviation (SD) and z-test statistic analysis between the mean ratings of urban Principals and rural Principals of public senior secondary schools on hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>SD</th>
<th>z - Cal</th>
<th>z-Crit</th>
<th>Df</th>
<th>Level of Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Principals</td>
<td>30</td>
<td>3.76</td>
<td>1.53</td>
<td>0.677</td>
<td>1.96</td>
<td>106</td>
<td>0.05</td>
<td>Ho1 Accepted</td>
</tr>
<tr>
<td>Rural Principals</td>
<td>15</td>
<td>3.73</td>
<td>1.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ho1 Accepted</td>
</tr>
</tbody>
</table>

In Table 4, the z – calculated value of 0.677 is less than the z – critical value of 1.96 at 106 degree of freedom and 0.05 level of significance. We accept the null hypothesis (Ho1) and therefore established that there is no significant difference between the mean ratings of urban Principals and rural Principals of public senior secondary schools on ways hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria.

**Discussion of findings**

The finding indicates that male and female principals of Public Senior Secondary Schools were all in agreement on the ways hazards arising from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria. It is incontestable that school facilities today constitute hazards everywhere in the schools. This affirms earlier works of Okorie (2002) in Agabi, et.al. (2002) that classroom, and indeed the entire school environment is pervaded with potential hazards and dangers, which are often over looked by teachers and other school personnel. The findings also indicate that the perception of urban and rural principals are the same on ways hazards arising from educational facilities can be curbed as appropriate strategy for school safety management in Rivers State, Nigeria. Thus, the importance good school facilities cannot be overstressed, as Abdulkareem, et.al (2012) assert that in the educational institutions, facilities constitute essential inputs which could generate favourable learning environment, facilitate interaction and enhance achievement of educational objectives. Such conditions are necessary perquisite for a safe school.

This also highlights the obvious need for educational facilities procurement and maintenance in schools to minimize the hazards created by existing poor state of these facilities in public schools today. All Stakeholders on education need to create impact on school safety by ensuring that every school has a serene environment for teaching and learning activities. There is need for school facility maintenance culture which has contributed to the poor safety
conditions in many schools today (Ugwulashi, 2016, Idu, 2004). Similarly, due to these hazards posed by poor state of facilities in schools, Asiabaka (2008) emphasizes the importance for effective facility management in schools in Nigeria. Educational facilities management requires good school leadership both internal and external. A good school leadership must seek collaboration with educational stakeholders to step action to remediating these dilapidated or non-existing facilities affecting proper academic environment. This supports the view of Pasiardis (2014) in Brinia and Tsouni (2017) that effective leader has the ability to pass on the vision and mission of the school to all stakeholders (teachers, students, parents, support staff and the local community) committing them creatively. This philosophy if transparently adopted by school leaders will help in school safety management.

Conclusion
This paper indicates the evidence of numerous hazards arising from educational facilities in the school environment. Clearly, the perceptions of male and female principals were the same on how these hazards arising from educational facilities can be curbed. Also imperative, is that urban and rural school principals hold similar opinion on how these hazards from educational facilities can be curbed as strategy for school safety management in Rivers State, Nigeria. School safety management has been a herculean task due to many factors. The expanding rate of school population world over is a major issue today confronting every educational system. Both the developing and advanced countries of the world faced this situation and in most countries no corresponding efforts to provide school infrastructure to meeting this expansion. Unfortunate nations are the developing countries with falling economies rocked by nepotism and corruptions of all kinds. Apart from dwindling economy, mismanagement of educational funds to expanding infrastructure has been main instrument. Existing facilities in most public schools today were provided about three decades ago and many are out of use constituting death traps. The increasing school attendant rate has overwhelmed the existing infrastructure making most of the school unhealthy for proper academic learning. There are no continual maintaining processes of existing educational infrastructure. Rather, school environments are filled with dilapidated structures and classrooms completely empty, thus, practically unsafe for meaningful curricular and extra-curricular activities. In many cases, existing facilities are completely overstretched, due to school population increase. Considering the fact that education is a vital tool for development, there is need to urgently equip schools with facilities for effective teaching and learning. Finally, it is convincing that educational facility constitutes part of school safety management.

Recommendations
This study recommends proper funding of education, even in the face of dwindling economy as it is the hub of any society and only instrument for national development and growth. Also there should be training of Educational administrators and managers on school administration and planning. They should be further train on school fund management to ensure adequate utilization of any revenue accruing to the school. The State ministry of education should reorganize inspectorate divisions at various levels to carry out periodic inspections of schools to complement internal administrative supervisions.
School administrators and managers should possess good interpersonal and human relations skill to do their job well.

School administrators should be able to provide records on school facilities and school managers provide checklists for appropriate maintenance. The state ministry of education should provide perimeter fence in every school to offer protection. This will checkmate entrances into the school premises that may result to facility damage. Finally, there should be collaboration amongst all education stakeholders to ensuring safe school environment through provision and maintenance of school facilities.

References