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SECURITY MEASURES ADOPTED BY PRINCIPALS IN THE MANAGEMENT OF SAFETY IN SECONDARY SCHOOLS IN ANAMBRA STATE

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ABSTRACT

This study investigated the security measures adopted by principals in the management of safety in secondary schools in Anambra state. Three research questions guided the study and three hypotheses were tested at 0.05 level of significance. A descriptive survey research design was adopted for the study. The population of the study was 5,507 consisting of 5,233 teachers and 274 principals in the state government owned secondary schools in the six education zones of Anambra State. A sample size of 797 consisting 523 teachers and 274 principals was drawn using multi-stage sampling procedure. A researchers' developed instrument titled "School Security Measures Questionnaire" (SSMQ) which was structured on a four point scale and validated by three experts was used for data collection. The internal consistency of the instrument was ascertained using Cronbach's Alpha method and this yielded a reliability coefficients of 0.72, 0.77 and 0.79 for the three sections of the instrument and 0.76 for the entire instrument. 797 copies of the instrument were administered to the respondents, 602 were retrieved and used for the analyses. Mean was used to analyze the research questions and t-test was used to test the hypotheses. The findings of the study indicated that physical and human security measures were adopted by principals while technological security measures were not adopted by principals. Based on the findings of the study, it was recommended that for a more proactive safety management in secondary schools in the state, the state government should make funds available to schools so they can acquire technological security gadgets such as metal detectors, CCTV, panic alarm system, motion detectors, temperature monitor among others which can help in the management of safety in schools.

Keywords: security, security measures, safety management.

Introduction

Since returning from the COVID-19 lockdown, the security situation in Nigeria appears to have become worrisome. More than ever, there is regular abduction of school children in most parts of the country, making safety and safety measures occupy the front lines of various national and state educational discourse. According to Lawal as cited in German, Obiekwe, Ogbo, Mbonu and Chukwu (2021), more than 300 schoolboys from Government Science Secondary School, Kankara in Katsina Sate were abducted by bandits on 11th of December 2020, though they were later released. Between June and July 2021, gunmen abducted 136 school students from Niger State and over 165 students of Bethel Baptist High School in Kaduna State. More recently on 1st of September 2021, 73 school students were abducted from government day secondary school in Zamfara State. During the period between

December, 2020 and September, 2021, over 1000 school students have been abducted in Nigeria. These incidences and many more highlight a worrisome development in the country's security crisis. Principals of secondary schools are particularly disturbed as over 96% of these figures are from secondary schools alone. These ugly situations have put additional pressure on principals to find effective security measures for safety management in their schools.

School safety can be defined as the creation of a school environment free from violence, where there is no perceived fear with respect to the school or its disciplinary procedures (Hernandez, Flooden & Bosworth, 2010). According to Butcher and Manning (2005) a safe school is one that provides a positive environment, allowing students, teachers, staff and visitors to interact without fear or threats and in a supportive way to achieve the educational mission of the school while fostering and nurturing personal growth. In other words, school safety is a process of protecting the school, students, staff and its environment from danger, harm and other hazardous risks that might disrupt the school system and the attainment of its set goals through the application of various security measures.

Security has been defined as the degree of protection against danger, damage, loss and crime. Orpinas, Home and Staniszewsk (2003), Van Jaarsveld (2011) defined security as a form of protection where a separation is created between the assets and the threat. Thus, security is the precaution taken to safeguard an environment from impending danger or injury. School security is the establishment and maintenance of protective measures that ensure a state of inviolability from hostile act or influences (Aryu, 2000). Security measures assess the vulnerability of risk and the introduction of techniques in order to create a stable, fairly predictable environment in which individuals may move freely (Lombaard & Kole, in Alimba, 2018). Security measures can also be seen as approaches that can be adopted to protect and manage school violence, reduce security risks, and ensure that the school environment is safe for teaching and learning (Laura, 2014). Security measures enhances the conduciveness of school to make teaching and learning process more effective especially when the measures are well-thought out and are responsive to threats and risks emanating from within or outside the school. Secondary school principals can adopt a combination of human, physical and technological security measures to create a stable and fairly predictable school environment which is free from threat, harm or danger.

Human security measure is the use of human beings in preventing and combating security threats within the school. Human security is all about how to make staff and students free from threats and to promote their wellbeing and welfare in order to enable them carry out their activities adequately. One of the significant security functions of human being is patrolling. This is when individuals (guards and security officers) move around the premises inspecting and observing the activities taking place and the locations where incidents or threats can occur on the premises in order to identify any risks (Van Jaarsveld, 2011). Some of the human components in security could

include guards, community and parental participation, school personnel, security officers, private security personnel on contract who may also offer a rapid armed response service or police officers.

Physical security measures involves the implementation of multiple interdependent layers of security system that can include protective barriers, perimeter fencing and other systems designed to protect persons and property. Principals of secondary schools can adopt physical security measures to ensure the safety of lives and property. When physical security measures are appropriately implemented, maximum protection will be guaranteed. According to Alimba (2018) some of the physical security measures that can be adopted by principals are the use of fence, locks and keys, safe and strong rooms, burglar proof, electronic equipment, among others. These security gadgets should be strategically fixed in places where the school management can easily use them to control and monitor people so as to prevent intruders from gaining access to such places.

Technological security measures deals with the application of tools and technical knowledge for the furtherance of security and promotion of safety in the school. It involves the application of security technologies to prevent and reduce violence, crimes, and risks in order to promote security and safety. The aim of using security technologies is to reduce opportunities to commit crimes or violence, to increase the likelihood that someone will get caught and to be able to collect evidence of some of the acts of violence being committed, thus making it easier to prosecute (Van Jaarsveld, 2011). The provision of security technologies such as CCTV surveillance system, protective lighting, alarm system, motion detectors in schools will help to reduce a good number of threats, risks and crimes that often occur in the school. It is pertinent therefore, that principals of secondary schools adopt the combination of human, physical and technological security measures in order to effectively manage safety in their schools.

Statement of the Problem

The security situation in Nigeria and indeed Anambra State appears to have become worrisome in recent times. There are frequent cases of kidnapping, wanton attacks on security personnel and government agencies by terrorists, bandits and "unknown gun-men" as well as incessant killings and abduction of school students making safety and safety measure a national and state discourse. Over 1000 students have been abducted in Nigeria between December 2020 and September, 2021, highlighting a worrisome development in the country's security nightmare. These ugly situations have put additional pressure on principals and stakeholders in the country to adopt effective security measures for the management of safety in their schools. This study therefore, investigated the security measures adopted by principals in the management of safety in secondary schools in Anambra State.

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Research Questions

The following research questions guided the study:

1. What are the physical security measures adopted by principals in the management of safety in secondary schools in Anambra State.
2. What are the human security measures adopted by principals in the management of safety in secondary schools in Anambra State.
3. What are the technological security measures adopted by principals in the management of safety in secondary schools in Anambra State.

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

1. Principals and teachers do not differ significantly in their mean ratings of the physical security measures adopted by principals in the management of safety in secondary schools in Anambra State.
2. Principals and teachers do not differ significantly in their mean ratings of the human security measures adopted by principals in the management of safety in secondary schools in Anambra State.
3. Principals and teachers do not differ significantly in their mean ratings of the technological security measures adopted by principals in the management of safety in secondary schools in Anambra State.

Research Method

A descriptive survey research design was adopted for the study which was carried out in public secondary schools in Anambra State. Three research questions guided the study and three null hypotheses were tested at the 0.05 level of significance. From a population of 5507 consisting 274 principals and 5233 teachers. A sample of 797 (523 teachers & 274 principals) was drawn using a multistage sampling procedure. A researchers' developed instrument titled "School Security Measures Questionnaire" (SSMQ) which was structured on a four point scale of Strongly Agree (SA), Agree (A) Disagree (D) and Strongly Disagreed (SD) weighted 4, 3, 2 and 1 and validated by three experts was used for data collection. The internal consistency of the instrument was ascertained using Cronbach's Alpha method and this yielded a reliability coefficients of 0.72, 0.77 and 0.79 for the three sections of the instrument and 0.76 for the entire instrument. The direct administration and retrieval method was used for data collection. Out of the 797 copies of the instrument administered, 602 were retrieved and used for the analyses. Mean was used to answer the research questions while t-test was used to test the null hypotheses at 0.05 level of significance. For the research questions, a mean rating of 2.50 and above was interpreted as agree while mean rating of less than 2.50 was interpreted as disagree. The null hypothesis was rejected where the calculated t-value was greater than critical value (1.96) whereas the null hypothesis

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was not rejected where the calculated t-value was less than the critical value.

Presentation of Results

Table 1: Displayed the Response of the Principals and Teachers on the Physical Security Measures Adopted By Principals in the Management of Safety

		Principals			Teachers		
S/N	**Items**	**Mean**	**SD**	**Remark**	**Mean**	**SD**	**Remark**
1.	Installation of perimeter fence round the school to deter intruders.	2.76	.65	Agree	2.72	.75	Agree
2.	Installation of burglary bars on windows in the school blocks to ward off intruders	2.34	.75	Disagree	2.03	.81	Disagree
3.	Installation of metal doors in offices and classrooms to deter intruders	2.33	.87	Disagree	2.07	.87	Disagree
4.	Provision of identity cards for staff and students for easy identification.	2.24	.83	Disagree	2.03	.83	Disagree
5.	Installation of security lights in and around the school premises to provide vision for guards.	2.76	.62	Agree	2.89	.77	Agree
6.	Installation of security gate to deter unauthorized access into the school premises.	2.86	.66	Agree	2.86	.78	Agree
7.	Provision of handwashing points around the school for proper handwashing	3.15	.59	Agree	3.02	.72	Agree
8.	Enforcement of the use of nose masks within the school	3.00	.70	Agree	2.97	.78	Agree
9.	Provision of hand sanitizers within the school	2.76	.59	Agree	2.79	.72	Agree

Table 1 shows the mean ratings of principals (2.76, 2.76, 2.86, 3.15, 3.00 & 2.76) and teachers (2.72, 2.89, 2.86, 3.02, 2.97 & 2.79) for item 1, 5, 6, 7, 8 and 9 indicating that principals and teachers agree that principals adopt physical security measures such as: installation of perimeter fence round the school to deter intruders, installation of burglary bars on windows in the school blocks to ward off intruders, installation of metal doors in offices and classrooms to deter intruders, provision of identity cards for staff and students for easy identification., installation of security lights in and around the school premises to provide vision for guards, installation of security gate to deter unauthorized access into the school premises, provision of handwashing points around the school for proper handwashing, enforcement of the use of nose masks and provision of hand sanitizers within the school.

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Table 2: Displayed the Response of the Principals and Teachers on the Human Security Measures Adopted By Principals in the Management of Safety

		Principals			Teachers		
S/N	Items	Mean	SD	Remark	Mean	SD	Remark
1	Employing security guards to monitor the school premises for improved school safety.	2.75	.64	Agree	2.77	.73	Agree
2	Collaborating with local vigilante groups to provide security around the school.	3.28	.59	Agree	2.99	.65	Agree
3	Liaison with security consultants for issues concerning school safety.	2.86	.66	Agree	2.81	.77	Agree
4	Collaborating with the police for rapid armed response services to the school.	3.15	.59	Agree	3.25	.58	Agree
5	Training school resource staff for security checks in the school.	3.00	.70	Agree	2.99	.69	Agree
6	Ensuring that visitors to the school are escorted to the appropriate location of their visit by security staff.	2.76	.59	Agree	2.88	.66	Agree

Analysis in Table 2 shows that principals and teachers agree to the 6 items in the table as the human security measures adopted by principals in the management of safety in the schools. The mean ratings for principals ranged from 2.75 to 3.28 while that of the teachers ranged from 2.77 to 3.25.

Table 3: Displayed the Response of the Principals and Teachers on the Technological Security Measures Adopted By Principals in the Management of Safety

		Principals			Teachers		
S/N	Items	Mean	SD	Remark	Mean	SD	Remark
1.	Use of metal detectors to check visitors coming into the school.	2.34	.75	Disagree	2.03	.81	Disagree
2.	Installation of close circuit cameras (CCTV) to monitor movements in and around the school.	1.74	.44	Disagree	1.65	.48	Disagree
3.	Use of electronic mass notification system to alert staff and students in an event of insecurity.	1.88	.32	Disagree	1.82	.38	Disagree
4.	Installing of panic alarms system to alert everyone in an event of emergency in the school.	1.83	.38	Disagree	1.69	.46	Disagree
5.	Installation of motion sensors to detect unauthorized movements around important areas of the school.	1.74	.44	Disagree	1.63	.48	Disagree
6.	Use of temperature monitoring device to take temperatures of individuals entering the school.	1.75	.44	Disagree	1.67	.47	Disagree

Table 2 shows that principals and teachers disagree to the five items in the table as the technological security measures adopted by principals in the management of safety in the schools. The mean ratings for principals ranged from 1.74 to 2.34 while that of the teachers ranged from 1.63 to 2.03.

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Table 4: t-test Comparison of the Difference between the Mean Scores of Principals and Teachers on the Physical Security Measures Adopted by Principals in the Management of Safety

Source of variation	N	Mean	SD	Df	t-cal	t-crit	Decision
Principals	257	2.69	.31	645	3.26	1.96	Sig
Teachers	390	2.60	.37				

The results in table 4 shows that the mean score for principals (*M*=2.69, *SD*=.31) was significantly greater than that of the teachers (*M=2.60, SD=.37*); *t (*645*) =3.26, t-crit=1.96.* The null hypothesis of no significant difference between the two groups on the physical security measures adopted by principals in the management of safety was therefore rejected.

Table 5: t-test Comparison of the Difference between the Mean Scores of Principals and Teachers on the Human Security Measures Adopted by Principals in the Management of Safety

Source of variation	N	Mean	SD	Df	t-cal	t-crit	Decision
Principals	257	3.43	.33				
Teachers	390	3.40	.38	645	.88	1.96	Not-Sig

The results in table 5 shows that the mean score for principals (*M*=3.43, *SD*=.33) was not significantly greater than that of the teachers (*M=3.40, SD=.33*); *t (*645*) =.88, t-crit=1.96.* The null hypothesis of no significant difference between the two groups on the human security measures adopted by principals in the management of safety was therefore not rejected.

Table 6: t-test Comparison of the Difference between the Mean Scores of Principals and Teachers on the Technological Security Measures Adopted by Principals in the Management of Safety

Source of variation	N	Mean	SD	df	t-cal	t-crit	Decision
Principals	257	1.88	.29				
Teachers	390	1.75	.34	645	4.76	1.96	Sig

Table 6 shows that the mean score for principals (*M*=1.88, *SD*=.29) was significantly greater than that of the teachers (*M=1.75, SD=.34*); *t (*645*) =4.76, t-crit=1.96.* The null hypothesis of no significant difference between the two groups on the technological security measures adopted by principals in the management of safety was therefore rejected.

Discussion of Findings

The finding of this study shows that principals adopt physical security measures in the management of safety in public secondary schools in Anambra State. The finding is in line with Van Jaarsveld (2011) that public school administrators have problems with maintaining adequate physical security in their schools. On the other hand the finding of this study is not in line with Onuorah and Eziamaka (2020) who found that principals in Anambra State to a low extent apply physical security measures for ensuring safety in secondary schools. Principals seems to have improved in their security and safety measures because of the high level of insecurity in all parts of the country presently. According to Juvonen (2001) administrators should try and implement programmes and policies which are designed to curb school violence such as physical surveillance including weapon deterrence and presence of security guard in the schools.

Another finding of this study shows that principals adopt human security measures in the management of safety in public secondary schools in Anambra state. According to Lombaard and Kole (2008), having human security measures on the premises might decrease students' staff and parents' fear of crime as well as assist with the prevention of crime within the school. This would allow for vulnerable areas of the school to be properly monitored and secured. The findings of this study is different from that of Onuorah and Nwankwo (2020) that principals to a low extent utilize human security measures in the school. As stated earlier, principals seems to have improved in their security and safety measures because of the growing state of insecurity in all parts of the country. This may have influenced the current findings.

The present study also found that principals do not adopt technological security measures in the management of safety. Schneider (2010) and Rich (2012) posits that technological security tools can be excellent tools and a great contribution to the safety of scholars and staff in schools and in reducing the incidences of violence in schools. The findings of this study is in consonance with that of Ike (2015) who posits that secondary school administrators do not apply technologies in management of school security in Nigeria. Ike called for the sensitization of school principals as well as educational administrators on the importance of applying technology in school security procedures for improved and more effective school safety management. This finding is also line with Onourah, Eziamaka and Ofojebe (2021) who found that principals apply technological security measures to a low extent.

Conclusion

From the findings of the study, the researchers concluded that principals adopt human and physical security measure in the management of safety in public secondary schools in Anambra state in era of Coivid-19. Principals however, do not adopt technological security measures in the management of safety in public secondary schools in Anambra State.

Recommendations

Based on the findings of the study, the researchers recommended the following:

1. For a more proactive safety management in secondary schools in the state, the Government of Anambra State should make funds available to schools so they can acquire technological security gadgets such as metal detectors, CCTV, panic alarm system, motion detectors, and temperature monitor among others which can help in the management of safety in schools.

2. Principals of secondary schools in the state should liaise with parents and old students' associations and groups in the school for support in terms of providing the schools with security gadgets and tools which will help in the management of safety.

REFERENCES

Alimba, C.N. (2018). Security and security measures for schools operating in domains prone to insurgency in Nigeria. *International Journal of Public Administration and Management Research*, 4(3):36-48.

Aryu, A. S. (2000). A step towards school safety: National disaster. Retrieved from http://docs.google.com/viewer,2&q .

Butcher, T.K., & Manning, M.L (2005). Creating safe schools. *The Clearing House*. 79 (1); 55-60.

German, I.O, Obiekwe, K.K., Mbonu, O.A., Ogbo, R.N & Chukwu, N.R (2021). Extending E-administration capabilities for safe school management using ICT peripheral devices in secondary schools in Ebonyi State, Nigeria. *European Journal of Education Studies*, 8(5), 334-345.

Hernandez, D., Floden, L., & Bosworth, K. (2010). How safe is the school? An explanatory study comparing measures and perceptions of safety. *Journal of School Violence*, 9 (15) 357-374.

Ike, A. O. (2015). *Security management situations in public Secondary schools in North Central Zone of Nigeria*. A Doctoral Dissertation, Department of Educational Foundations, University of Nigeria, Nsukka.

Juvonen, J. (2001). *School Violence: Prevalence, Fear and Prevention*. California. RAND Corporation.

Lamboard, C. and Kole, J. (2008). *Security principles and practices,* SEP A:

Units 1-10. Pretoria: University of South Africa

Onuorah, H.C. & Nwankwo, F.I. (2020). Human security management practices utilized by principals for effective administration of public secondary schools in Anambra State. *Sapientia Foundation Journal of Education, Sciences and Gender Studies*, 2(2), 193-201.

Onuorah, H.C., Eziamaka, C.N., & Ofojebe, E.N. (2020) Principals application of technological security management practices for curbing security threats in secondary schools in Anambra State. *Unizik Journal*, 2(2), 13-22.

Orpinas, P. Home. A.N and Staniszewsk, D. (2003). School bullying: Changing the problems by changing the school. 32(3) 431 44.

Luara, S. (2014). *Ways of school security management.* Retrieved from www.securitymanagement.com/article/schools-lessons-005964.

Rich, M. (2012). *School officials look again at security measures once dismissed*. New York: The New York Times.

Schneider, T. (2010). *School security technologies*. USA: National Clearinghouse for Educational Facilities.

Van Jaarsveld, L. (2011). An investigation of safety and security measures at secondary schools in Tshwane, South Africa. A Master's thesis, University of South Africa.