



RELATIONSHIP BETWEEN SECURITY MEASURES AND MANAGEMENT OF TERTIARY INSTITUTIONS IN NIGER STATE, NIGERIA



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Abstract

This empirical paper is on relationship between security measures and management of tertiary institutions in Niger state, Nigeria. The research emphasizes on how the human security measures and physical security measures can be fully applied in the tertiary education system to enhance effective management. Two objectives and two research questions were answered, including the testing of two hypotheses at 0.05 level of significance. A descriptive survey research designed was used. The population of this study is 1, 687 representing 725 academic staff and 962 non – academic staff in two (2) tertiary institutions in Niger state, Nigeria. The sample size is 166 representing 10% of the 725 academic staff and 962 non – academic staff. The simple random sampling procedure was adopted in determining the sample size. A questionnaire: Relationship between Security Measures and Management of Tertiary Institutions (QRSMMTI) was used for data collection. Data were analyzed using descriptive statistics. Hypotheses were tested using Pearson Product Moment Co-efficient Co-relationship (PPMCC) statistical tool. The finding reveals that there is a strong relationship between human security measures and physical security measures in the effective management of tertiary institutions in Niger state. This paper provides recommendation for the provision of well-trained security personnel and sufficient physical security measures for the enhancement of effective security management of tertiary institutions in Niger state, Nigeria.

Keywords: Security Measures, Education, Management and Tertiary Institutions

Introduction

Education in general and tertiary education in particular in every society is obviously known to be an indispensable tool for nations' economic growth and development. It is a common knowledge that in the world over, tertiary education is an enterprise that produces and distributes public good, which is knowledge (Olatunji 2018). As asserted by Phaneuf (2006) and Ayo (2013), the production of knowledge by tertiary institutions has always focused on teaching, learning and research, hence, it is believed that tertiary education is a major investment requiring a huge amount of financial resources, thus funds allocated to tertiary education are said to be long term investments of immense benefits both to the individual and to the society.

In Nigeria institutions are established by both the Federal and States government. Tertiary education in Nigeria is an education that is acquired after the completion of secondary education (Olatunji (2018). According to Imo, Egbe and Terfa (2024), tertiary education encompasses all post secondary school learning in a range of settings including work places, universities, colleges of education, polytechnics/monotechnics and innovative enterprise institutions. Tertiary education produces values that help individuals benefit themselves and contribute meaningfully to the development of the society in various fields of profession. The Federal Government of Nigeria in its National Policy of Education (2013) hopes that these values can be better inculcated through a well-designed national system of tertiary education whose broad objectives were stated as follows:

- i) the inculcation of national consciousness and national unity;
- ii) the inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian Society;
- iii) the training of the mind in the understanding of the world around; and

- iv) the acquisition of appropriate skills, abilities and competences both mental and physical as equipment for the individual to live in and contribute to the development of this society.

The tertiary education system is composed of both human and material resources. The human resources are the academic and non – academic staff, students, and other stakeholders that are directly or indirectly connected with the school. The connection depends on the nature of services rendered to the system. The material resources involve facilities such as school building, records, including money as well as programmes in school. These resources are expected to be protected from threat, harm and danger for the assurance of their longevity and performance of the system. According to Lombaard and Kole (2008), security measures assess the vulnerability of risk and to introduce techniques and measures at schools, in order to create a stable, fairly predictable environment in which individuals may move freely. Security measures are approaches that can be adopted to protect and manage school violence, reduce security risks, and ensure that the school environment is safe for learning (Laura, 2014). These measures are functional and operational methods that make schools free from crimes, threats and risks. It enhances the conduciveness of school to make teaching and learning process more effective. The advocates of school security measures suggest that these measures may not only reduce crime and disorder but also reduce student fear by sending a message that the school takes violence seriously and is actively doing something to curtail it Phaneuf, (2006), Iwuamadi & Akuakanwa,(2024). School security measures work for good especially when the measures are well-thought out and are responsive to threats and risks emanating from within or outside the system. For schools to be secured, the security measures should embrace the following: human security measures, physical security measures, policy security measures and technological security measures.

Human security measures are a means of controlling and safeguarding a place. Humans are functional and fundamental resources in security policy agenda and implementation. The human factor in security system determines what decision should be made, how and the nature of action to be taken. 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 can occur on the premises in order to identify any risks (Jaarsveld, 2011). Human security measures also involve training academic, non – academic staff as well as students in security issues to enhance their security consciousness for appropriate reactions to threats in schools. According to Jaarsveld (2011), if an alarm is triggered at a school, a policeman or security guard will have to respond to the alarm in order for the technological aid to work effectively and for the intruder to be apprehended. Some of the human components in security could include guards, community and/or parental participation, school personnel, security officers, private security company personnel on contract who might also offer a rapid armed response service or police officers. However, in tertiary institutions in Niger state, human element in security systems is often either overlooked or neglected completely. This may be to save cost or to run away from the inherent dangers associated with using human factor in security systems. These reasons are considered feeble because human element in security system is not negotiable.

Physical security measures are those barriers put in place to prevent access to a property or a facility. According to Lombaard and Kole (2008) and Herbert (2024), the purposes of physical security measures are to (i) deter an intruder from entering the premises (ii) detect the attempted entry or presence if an intruder succeeds in penetrating (i.e getting through) the physical security barrier or measure in place (iii) limit the harm that can be done if an intruder manages to gain entry without being detected and (iv) detain the intruder by using silent alarm or alerting a security patrol (to respond). Some of the physical security measures that can be adopted are the use of fence, locks and keys, safe and strong roof, burglar proof, electronic equipment (e.g CCTV system, metal detectors, x-ray machines, card reader systems and alarm) and communication system (radio, telephone, intercom systems). 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 having access to such places. The use of physical security measures in the tertiary education system will help to monitor and prevent the illegal access of people into school including hoodlums and terrorists. Schools should be

fenced and protected gates mounted where necessary to deter easy access to schools. After school day or closing period, classrooms and offices should be locked and burglar proof provided in places considered essential for the prevention of intruders. Although, these physical security measures are costly, they are essential for the security of schools to promote safety. The P.T.A and community members gradually provide some of these facilities to safeguard schools and prevent insurgents from easily gaining access to schools for attacks. Equally, security lights should be provided for effective monitoring of schools especially at nights. In tertiary institutions in Niger state, the physical elements of the security system are not fully acquired and put in place. Most classes and offices may not be properly under lock and key. The fences of the institutions may not be managed and maintained which may leads to collapse of some school fence. These may limit the security personnel in the school system to give adequate and needed security protection to the school facilities. It is against this background information that this empirical paper examines relationship between security measures and management of tertiary institutions in Niger state, Nigeria.

Research Questions

The following research questions were formulated to guide the study:

1. How does human security measure relate to effective management of tertiary institutions in Niger state, Nigeria?
2. How does physical security measure relate to effective management of tertiary institutions in Niger state, Nigeria?

Purpose of the Study

The main aim of this research work is to examine relationship between security measures and management of tertiary institutions in Niger state, Nigeria. The specific objectives of the study are to:

1. Determine how human security measure relate to effective management of tertiary institutions in Niger state, Nigeria
2. Examine how physical security measure relate to effective management of tertiary institutions in Niger state, Nigeria

Hypothesis

Based on the objectives of the study and the stated research questions, two hypotheses were constructed to help address the research problem:

HO1: There is no significant relationship between human security measure and effective management of tertiary institutions in Niger state, Nigeria

HO2: There is no significant relationship between physical security measure and effective management of tertiary institutions in Niger state, Nigeria

Methodology

The study adopted a descriptive survey research design to examine relationship between security measures and management of tertiary institutions in Niger state, Nigeria. A Population of 1, 114 representing 485 academic staff and 629 non – academic staff in two (2) tertiary institutions in Niger state, Nigeria was used. Simple random sampling procedure was adopted in determining the sample. The sample size is 109 representing 10% of the 485 academic staff and 629 non – academic staff of tertiary institutions in Niger state at a 5% (0.05) level of significance. The level of significance indicates the confidence the researcher has on the sample that the subjects drawn, has all the characteristics of the population. This means that we are 95% confident that the sample members have all the essential characteristics of the population.

A 10 – item researchers made questionnaire with four- point modified Likert rating scale of strongly agreed (SA), Agreed (A) and Disagreed (D) strongly disagreed (SD) was used to collect data from the respondents. The instrument yielded a reliability co –efficient of 0.78 which was derived by administering the questionnaire to the respondents using split half reliability test method.

The instrument was personally administered to the academic and non – academic staff. Descriptive statistics of mean and standard deviation were used to answer the research questions. Pearson Product Moment Co-efficient Co-relationship (PPMCC) statistical tool was used to test the null hypotheses at 0.05 level of significance.

Results

The results of the findings are presented in tables 1 and 2.

The data collated from research question one was analyzed in the table below using descriptive statistics (Mean Ratings and Standard Deviation).

Table 1: Mean Ratings and Standard Deviation of Respondents on how human security measure relate to effective management of tertiary institutions in Niger state, Nigeria

Item No	Item Description	SA	A	D	SD	$\bar{X}$	SD	Decision
1.	The use of trained security personnel aids the human security measures in an environment	54	36	10	9	3.35	0.68	Agree
2.	The use of trained security personnel aids the physical security measures in an environment	64	26	9	10	3.44	0.57	Agree
3.	The use of trained security personnel aids the technological security measures in an environment	59	31	11	8	3.37	0.68	Agree
4.	The use of trained security personnel aids the security consciousness in an office environment	54	41	10	4	3.33	0.69	Agree
5.	The use of trained security personnel reduces the security threat in an office environment	59	41	4	5	3.23	0.79	Agree
Cluster Mean						3.34		Agree

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2.	The use of trained security personnel aids the physical security measures in an environment	64	26	9	10	3.44	0.57	Agree
3.	The use of trained security personnel aids the technological security measures in an environment	59	31	11	8	3.37	0.68	Agree
4.	The use of trained security personnel aids the security consciousness in an office environment	54	41	10	4	3.33	0.69	Agree
5.	The use of trained security personnel reduces the security threat in an office environment	59	41	4	5	3.23	0.79	Agree
Cluster Mean						3.34		Agree

Source: Field Study 2025

Table 1 shows that items 1-5 had mean scores of 3.35, 3.44, 3.37, 3.33 and 3.23 with corresponding standard deviations of 0.68, 0.57, 0.68, 0.69 and 0.79 respectively. Based on the criteria for decision making, it means that all the items were rated above the cut-off point of 2.50. The cluster mean of 3.34

was also above the cut-off point of 2.50. The standard deviation scores of the respondents are small signifying homogeneity for the items raised. This implies that human security measure relates to effective management of tertiary institutions in Niger state, Nigeria.

The data collated from research question two was analyzed in the table below using descriptive statistics (Mean Ratings and Standard Deviation).

Table 2: Mean Ratings and Standard Deviation of Respondents on how physical security measure relate to effective management of tertiary institutions in Niger state, Nigeria

Item No	Item Description	SA	A	D	SD	$\bar{X}$	SD	Decision
6.	The use of close circuit television aid the human security measures in an environment	51	49	5	4	3.55	0.62	Strongly Agree
7.	The use of surveillance cameras aids the physical security measures in an environment	49	46	4	10	3.40	0.66	Agree
8.	The use of surveillance cameras aids the security consciousness in an office environment	55	35	8	11	3.37	0.71	Agree
9.	The use of close circuit television aids the security consciousness in an office environment	60	30	10	9	3.43	0.64	Agree
10.	The use of computers and its facilities aids the physical security measures in an environment	50	40	9	10	3.64	0.57	Strongly Agree
Cluster Mean						3.48		Agree

Source: Field Study 2025

Table 2 shows that items 6-10 had mean scores of 3.55, 3.40, 3.37, 3.43 and 3.64 with corresponding standard deviations of 0.62, 0.66, 0.71, 0.64 and 0.57 respectively. Based on the criteria for decision making, it means that all the items were rated above the cut-off point of 2.50. The cluster mean of 3.48 was also above the cut-off point of 2.50. The standard deviation scores of the respondents are small signifying homogeneity for the items raised. This implies that physical security measure relates to effective management of tertiary institutions in Niger state, Nigeria

Test of Hypothesis

In order to test the two hypotheses of this study, the Pearson Product Moment Correlation Co-efficient was used to test the options of respondents at 0.05 level of significance and the results are presented on Tables 3 and 4.

Test of Null Hypothesis 1

H01: There is no significant relationship between human security measure and effective management of tertiary institutions in Niger state, Nigeria. The result of the analysis of data using Pearson Product Moment correlation statistics is presented in Table 3.

Table 3:

Summary of Correlation analysis of the relationship between human security measure and effective management of tertiary institutions in Niger state, Nigeria

Variables	$\sum X$ $\sum Y$	$\sum Y^2$ $\sum Y^2$	$\sum XY$	r-cal
Human Security Measure	54	22031	18429	0.364*
Effective Management of Public Universities	36	19442		

* $p < .05$; d f= 430; critical – $r = 0.098$

The results presented in Table 3, revealed that the calculated r-value of 0.364 is greater than the critical r-value of 0.098 at .05 level of significance and 158 degrees of freedom. With this result, the null hypothesis is rejected implying that; there is a significant relationship between human security measure and effective management of tertiary institutions in Niger state, Nigeria. However, there was a weak positive relationship ($r=0.364$) between the variables which were statistically significant in explaining security measures.

Test of Null Hypothesis 2

H02: There is no significant relationship between physical security measure and effective management of tertiary institutions in Niger state, Nigeria. The result of the analysis of data using Pearson Product Moment correlation statistics is presented in Table 4.

Table 4

Summary of Correlation analysis of the relationship between physical security measure and effective management of tertiary institutions in Niger state, Nigeria

Variables	$\sum X$ $\sum Y$	$\sum Y^2$ $\sum Y^2$	$\sum XY$	r-cal
Physical Security Measure	51	22117	19827	0.624*
Effective Management of Public Universities	49	19442		

* $p < .05$; d f= 430; critical – $r = 0.098$

The results presented in Table 4, revealed that r calculated value of 0.624 is greater than the critical r-value of 0.098 at .05 level of significance and 158 degrees of freedom. As a result, the null hypothesis was rejected implying that; there is a significant relationship between physical security measure and effective management of tertiary institutions in Niger state, Nigeria. In addition, there was a moderate positive relationship ($r=0.624$) between physical security measure and effective management of tertiary institutions in Niger state, Nigeria.

Discussion of Findings

The study which sets out to examine relationship between security measures and management of tertiary institutions in Niger state, Nigeria revealed that, there is a strong relationship between human security measures and physical security measures in the effective management of tertiary institutions in Niger state. Additionally, human security measures are a means of controlling and safeguarding a place. Humans are functional and fundamental resources in security policy agenda and implementation. The human factor in security system determines what decision should be made, how and the nature of action to be taken. 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 can occur on the premises in order to identify



any risks. Furthermore, the physical security measures such as CCTV system, metal detectors, x-ray machines, card reader systems and alarm, etc, deter an intruder from entering the premises, detect the attempted entry or presence if an intruder succeeds in penetrating (i.e getting through) the physical security barrier or measure in place, limit the harm that can be done if an intruder manages to gain entry without being detected and detain the intruder by using silent alarm or alerting a security patrol (to respond).

Conclusion

There is indeed a significant relationship between security measures and management of tertiary institutions in Niger state, Nigeria. From the findings, human security measures are a means of controlling and safeguarding a place. Humans are functional and fundamental resources in security policy agenda and implementation. The human factor in security system determines what decision should be made, how and the nature of action to be taken. One of the significant security functions of human being is patrolling. The persistence of insecurity has been claiming precious lives of citizenry and government efforts to tackle the problem through various menial methods and approaches such as the use of police, military, vigilante and local hunters seem not to be yielding success. However, the effective use of physical security devices such as computer, internet, mobile phone, close circuit television (CCTV), surveillance cameras, social network analysis, biometry surveillance, data mining, satellite imagery, and IP devices, the satellite would definitely produce the desired results.

Recommendations

Based on the findings of the study, the following recommendations are made:

- 1) Niger state government should ensure that well trained security personnel are deployed to tertiary institutions in ensuring effective and efficient security measures in offices and environment within the tertiary institutions for the enhancement of effective security management of tertiary institutions in Niger state, Nigeria
- 2) Niger state government should ensure that internet and internet facilities in sufficient quantity and quality are provided to make room for effective and efficient security measures in offices within the tertiary institutions for the enhancement of effective security management of tertiary institutions in Niger state, Nigeria

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