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Library Security Policy and Use of Electronic Security Systems in Academic Libraries in South-West Nigerian Public Universities

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Abstract: The study examined library security policy and the use of electronic security systems in academic libraries in South-West Nigerian Universities using a descriptive survey design. The population comprised library staff of Nigerian public Universities in the South-West. The purposive sampling technique was used to sample first-generation public universities in South-West, Nigeria. The universities surveyed were the University of Lagos, Obafemi Awolowo University, Ile-Ife, and the University of Ibadan, Ibadan, Nigeria. Simple random sampling was adopted to select 40 library staff (University Librarians, Librarians, Para-professional library staff, and ICT personnel) in each sampled University, totaling 120 respondents constituting the sample size. However, one hundred and nine (109) copies of the questionnaire were returned and found useful for answering research questions. Descriptive statistics was used to answer three research questions. The findings of the study are as follows: the extent to which electronic security systems are used in academic libraries in South-West Nigerian public universities was to a high extent; the major challenges faced by academic libraries are failure of universities' management to pay attention to the security needs, poor funding, systems failure, low Internet connectivity, and inadequate technical skills; level of effectiveness of electronic security systems in academic libraries in South-West Nigerian universities was found to be high; and level of compliance with library security policies in South-West Nigerian public universities was on the high side.

Keywords: Library security policy, Electronic security systems, Academic libraries, Public universities, South-West Nigeria

1. Introduction

The library serves as the pillar of higher educational institutions (HEIs), particularly Nigerian Universities where learning, teaching, research, and community service depend on the materials that are available in the library. Library is vital for academic staff, non-teaching staff and students because it helps them to get information resources for reading, learning and research/report writing and advance academic performance (Nyemezu, Oladipupo, and Ejuh, 2025). To meet this important task in the academic community, the use of electronic security systems should be adopted and prioritised as theft, vandalism and mutilation. Libraries began to use security systems in the 7th century B.C. in order to avoid the loss and damage of information resources (Gladness and Ibrahim, 2025). During that time,

world security was not stable due to the occurrence of wars and other destructive issues like fire, with reference to the burning of the Library of Alexandria 48BC and the Library of Congress in 1812 (Abduldayan, Fasola, Oyedum and Jibril, 2019). As a result of these damages, university libraries were using different measures including stopping users from entering the library with bags and heavy coats, engaged security personnel and library staff to search users before entering the library. However, it was found that securing library materials from theft, vandalism and mutilation may not be achieved by using manual ways of protecting information resources due to the increased number of library patrons and more services that were being offered in the library (Sanga, 2023).

As university library services expanded and number of users grew, the inadequacies of manual security measures became increasingly apparent. Relying solely on guards and staff proved insufficient to combat the rising threats of theft and damage. Consequently, libraries began exploring alternative solutions to bolster security and safeguard their invaluable collections. In response to these challenges, many higher institutions of learning, including Universities in South-West Nigeria, turned to the installation of electronic security systems as a proactive solution to fortify their library defenses from external intrusions (Gladness and Ibrahim, 2025).

Electronic security systems are those modern technologies used in the library to secure library information resources against unauthorised removal, theft, mutilation, vandalism, hiding of library materials, writing and drawing on pages, folding library resources, use of other patron's library cards, duplicating ownership stamps among others (Nyemezu, Oladipupo and Ejuh, 2022). Electronic security systems involve the use of diverse technologies to safeguard information resources in the library. These technologies include RFID (Radio Frequency Identification), CCTV (Closed-Circuit Television) cameras, biometric authentication, and intrusion detection systems among others. These systems offer numerous benefits over manual ways of security measures, including real-time monitoring, rapid response capabilities, and the ability to track and trace assets seamlessly.

Despite the potential benefits, use of electronic security systems poses many challenges for libraries' resources, including technical complexities, financial constraints, and user acceptance issues. Integrating these systems within the existing infrastructure requires careful planning, resource allocation, and stakeholder engagement to ensure successful implementation. Interrupted power supply, inadequate funding, weak policies, and insufficient library staff training are common challenges that hinder effective use of electronic security systems.

Nigerian University libraries are expected to use electronic security systems to safeguard the library materials due to increase in the number of users, and where library staff can no longer monitor the users through traditional or manual security methods. However, the use of electronic security systems seems to be ineffective due to several factors that disturb application of modern systems of protecting information resources in the library. One of the factors is library security policy which appears to affect the poor usage of electronic security systems in Nigerian university libraries.

Library policy can simply be defined as a guide to the operations and management of library services delivery. It serves to maintain standards and avoid inconsistencies. It is used to measure the extent to which a library performs

its functions and meets its objectives, as well as its systems and services. This is connected to the library's role as an instructional midpoint for meeting public information requirements. The library security policy was created to outline measures for maintaining adequate and efficient use of electronic security systems at all times; that everybody inside the library facility feel safe and secure, and that the library's structures, facilities, and resources are kept protected. Olabode (2017) reported that there is a lack of proper collection policy and procedures formulated to support the security of the library collection and the activities involved in the management of security issues in libraries. There is a need to employ library security policy in order to utilise the electronic security systems effectively and efficiently.

Library security policy, therefore, becomes crucial to lay out strategies and frameworks for managing the library's response to threats to people, buildings, collections, and infrastructure. Conversely, to efficiently operate a library in these changing times, the use of electronic devices is crucial. Although these devices are expensive, the cost of the alternative (loss of collections) is equally expensive in the long run (Gupta and Madhusudhan, 2019).

A library's security policy on electronic security systems is expected to encompass a comprehensive strategy that includes physical and digital protection. Key components include the use of CCTV, RFID gates, and alarm systems, alongside policies for access control, digital resource protection, and user behaviour. Effective policies of electronic security systems are crucial for protecting both physical and digital collections from theft, damage, and unauthorised access (Endouware and Okwu, 2023). The security of the library's resources, building, and systems is as important as acquiring them. Without adequate security facilities put in place to safeguard the library's collections, building, premises, and staff, valuables and services will certainly be in jeopardy. So, the deployment of electronic security systems is the modern way for the safeguard of academic libraries from external intrusions. Agboola and Aduku (2019) in their study suggested that, appropriate library policy be made to guide all issues of security, planning, and implementation of management decisions as they affect library users and their personal effects, amongst others. This study, therefore, assessed library security policy and the use of electronic security systems in academic libraries in South-West Nigerian Universities.

1.1 Statement of the Problem

In Nigerian libraries, there has been little research on library security policy. However, there is still a push to integrate electronic security systems into library operations for better services on the one hand, and the actual implementation and usage of these electronic security systems on the other, particularly among Nigerian University libraries. This research aims to close that gap. Even though some University libraries have spent a significant amount of money to safeguard their resources, they continue to face threats, assaults, and vulnerabilities. University Librarians seem to create techniques for the prevention and illegal access to library resources, library management, and information, in order to offer proper security to secure the library's information resources. The information-bearing materials that enable the library to realize its purpose of serving the information demands of its users are referred to as library resources. Library and information centers continue to be perplexed as to why unauthorized persons gain access to their collections; why they still experience hackers' attack and theft of information resources,

why some confidential information get to the public domain, why virus and malware attack their systems and most times, staff do not give full assistance to their users in terms of the information they are seeking. Electronic security systems that guarantee the integrity, confidentiality, and ownership of information in the libraries are a desired goal.

1.2 Objectives of the Study

The main objective of this study is to examine library security policy and the use of electronic security systems in academic libraries in South-West Nigerian universities. Specifically, the study ascertains the extent of usage of electronic security systems in academic libraries; determines the library security challenges encountered by academic libraries; examines the effectiveness of electronic security systems in academic libraries; and determines the level of compliance with library security policies in South-West Nigerian public universities.

1.3 Research Questions

The following research questions guided the study

1. what is the extent of usage of electronic security systems in academic libraries in Nigerian public universities?

2. What are the library security challenges encountered by academic libraries in South-West Nigerian public universities?

3. what is the level of effectiveness of electronic security systems in academic libraries in South-West Nigerian public universities?

4. What is the level of compliance with library security policies in South-West Nigerian public universities?

2. Literature Review

Gladness and Ibrahim (2025) investigated the challenges facing Mzumbe University Library (MUL), using qualitative and quantitative data collection approaches. The study used questionnaire for the collection of data from 41 library staff members through purposive sampling technique. The result of the study shows that there are three types of electronic security systems used at the MUL: Theft detection, smoke detection, and Closed-Circuit Television (CCTV) cameras. Also, the study identifies personal, technical, management, and financial factors as the challenges facing MUL in operating the electronic security systems.

Nyemezu, Oladipupo, and Ejuh (2022) adopted a descriptive survey design and statistics to examine availability and utilization of electronic security systems among university libraries in Rivers State Nigeria. The population of the study comprised 187 staff in Rivers State university libraries. Observation checklist and questionnaire were used for data collection. The study revealed that, the electronic security systems available in the university libraries studied in Rivers state, Nigeria were Close Circuit Television (CCTV), Library oriented Software and Fire Alarm System. The extent of utilization of electronic security systems is very low. The major challenges identified are inadequate funding to support the electronic security systems, lack of university management attention on the security needs of

the institutions, erratic electric power supply, and inadequate technical skills to operate electronic security systems by the personnel of the libraries.

Furthermore, in the research carried out by Echem and Okwu (2023), they employed descriptive research survey design to investigate library security and sustainable services. The population of the study was thirty-one (31) professional and para-professional staff in Donald Ekong Library, University of Port Harcourt. Census sampling technique was adopted to select all the respondents. The data was analyzed using simple percentages presented in charts, mean scores and standard deviation. The study revealed that smart card access control, CCTV, fire extinguisher, installation of window burglary, door intrusion alarm, panic alarm, perimeter alarm system and RFID were the security systems adopted in Donald Ekong Library, University of Port Harcourt. Interestingly, smart card access control, door intrusion alarms, perimeter alarm system, installation of window burglary and panic alarm were implemented to a high extent. The study also found that reprographic services, current awareness services, OPAC, digital library services, orientation programmes, indexing services, referral services, abstracting services, selective dissemination of information, digital reference services were the services rendered in the University. However, inadequate funding, inadequate staff, weak library security policy, non-challant attitude of staff, conspiracy between staff and patrons, inadequate staff training on security measures and poor lighting were identified as the major challenges for the delivery of effective library services in Donald Ekong Library, University of Port Harcourt.

In the same vain, in a similar research conducted by Emezaiwakpo (2023) the study was on the effect of self-regulatory libraries and security in a university library environment in the university libraries in South-South, Nigeria. The paper adopted the descriptive survey design, and a census technique was also adopted to select 301 academic librarians in all the university libraries in South-South Nigeria. Compliance with library security policies and emergency preparedness was also strongly agreed on. The study further reported that no significant difference in the mean rating of compliance with library security policies and emergency preparedness was upheld. It reveals the various strategies, such as securing personal belongings, paying attention to suspicious activities by library users, complying with stipulated security library policies, and the emergency preparedness that the library management needs to put in place.

For Okike and Adetoro (2021), their study discovered that all university libraries had strong password protection, software upgrades, firewalls, audit and accountability trails on their systems, but information system access control was generally weak. Abomhara and Køien (2015) identified the most commonly known threats as Denial of Service (DoS), physical attacks, malware, password cracking, intrusion, packet sniffing, impersonation, external hacking, and attacks on privacy.

In his research, Khurshid (2015) examined the electronic security and surveillance systems implemented in Higher Education Commission-approved university libraries in Punjab and the Federal Area, Islamabad. According to the findings, no academic libraries, especially university libraries, can be completely protected from various library collection security issues, regardless of the use of electronic security and surveillance technologies. However, incidences of library collection loss can be reduced if university library management views library collection

security and safety as a serious concern and implements effective electronic monitoring, security, and book detection systems in their libraries.

Jagadish and Sarasvathy (2016) opined that electronic security systems like CCTV, RFID can help libraries to control, minimize, and avoid library material theft and unethical access. Ezeabasili and Nwosu (2018) adopted a descriptive survey research design to study the use of electronic security systems in the security of information resources in Federal University Libraries in Southern Nigeria. Their study found out that the available electronic security systems in these libraries were not in regular use, while in the University of Nigeria, Nsukka, their available electronic security systems are no longer in use. Their study also revealed that RFID (Radio Frequency Identification Systems) is not in use in any of these Federal University Libraries. Main reasons identified as being responsible for the occasional use of electronic security systems include poor maintenance, inadequate funding, and incessant power outage. Despite the technological and budgetary restrictions, Nath and Deka (2020) claimed that they successfully adopted and implemented both conventional or manual and technology or digital data security solutions. The major essential factor used for the protection library resources from theft was the implementation of an effective security plan. The majority of libraries have institutional security policies in place, so that they can adhere to it.

2.1 Theoretical Framework.

A theoretical framework is the collection of concepts that are related in determining what should be measured and what statistical relationships to look for. The central focus of this study is to investigate library security policy and the use of electronic security systems in academic libraries in South-West Nigerian Universities using a descriptive survey design. The theoretical framework offers a well-supported rationale to carry out one's study as a researcher and helps the reader to comprehend one's view. A theory could be viewed as a statement that stipulates the relationships between variables in order to explain phenomena like human behaviour (Welman et al., 2005:21)

2.2.1 The Unified Theory of Acceptance and Use of Technology (UTAUT)

The current study requires a more sophisticated model such as the Unified Theory of Acceptance and Use of Technology (UTAUT) that focuses both on people and the surroundings in which they function, and not just on individual behaviours as postulated by the various theories related to information technology/information system (IT/IS). Another identifiable gap with other theories is, the use of students majorly as participants. The Unified Theory of Acceptance and Use of Technology (UTAUT) is not only going to be used for this study that captures students but goes beyond to include workers and work environments/situations. Furthermore, the Unified Theory of Acceptance and Use of Technology (UTAUT) model has been authenticated through longitudinal researches, and this has made its strength to be established overtime and in diverse circumstances (Venkatesh et al., 2003). The Unified theory of Acceptance and use of Technology is a hybrid theory having harnessed and incorporated prominent constructs of other eight related theories. UTAUT is also very broad and has been said to outperform other related theories. Venkatesh et al., (2003) introduced the Unified Theory of Acceptance and Use of Information Technology with **"**four core determinants of intention and usage, and up to four moderators of key relationships**"**

(Kriponant, 2007). The four constructs are: Performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC).

(a) Performance Expectanc: is defined as "the degree to which the user expects that using the system will help him or her attain gains in job performance" (Venkatesh et al, 2003:447). In the light of this study, it is the degree to which the use of electronic security systems in academic libraries in selected universities in South-West, Nigeria will enhance the curbing of thefts, mutilation and vandalism of library resources and eventually help secure the academic libraries from security issues.

(b) Effort Expectancy:is defined is "the degree of ease associated with the use of the system" (Venkatesh et al, 2003:450). As far as this study is concerned, EE is the degree of ease associated with the use of ESS in curbing the menace of theft, mutilation and vandalism of information resources in academic libraries of selected public universities in South-West, Nigeria. EE in Unified Theory of Acceptance and Use of Technology (UTAUT), captures all the research questions in this study.

(c) Social influence: is seen as "the degree to which an individual perceives that important others believe that he or she should use the new system" (Venkatesh et al., 2003:451).

(d) Facilitating conditions: are "the degree to which an individual believes that an organisational and technical infrastructure exists to support use of the system" see figure 1 (Venkatesh et al., 2003:453).

The justification of the Unified Theory of Acceptance and Use of Technology (UTAUT) as the underpinning theory for this study is because the researcher considers it appropriate as the theory of choice for this study, being that it is the most recent theory for the study of information technology use and it also incorporates the constructs of the other eight related theories for studying information/technology use. The figure below shows the constructs of the Unified Theory of Acceptance and Use of Information Technology (UTAUT)

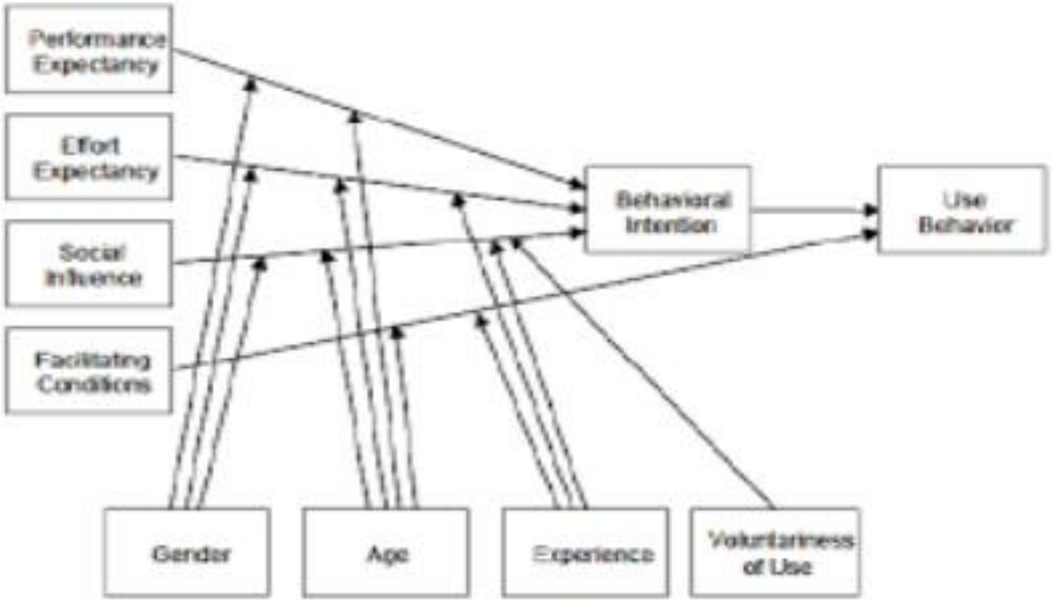

Figure 1: Unified Theory of Acceptance and Use of Technology (UTAUT) (Source: Venkatesh et al., 2003)

3. Methodology

The study adopted a descriptive survey research design, while the population comprised library staff of Nigerian public universities in the South-West. The purposive sampling technique was used to sample first-generation public universities in South-West, Nigeria. The universities surveyed were the University of Lagos, Lagos, Obafemi Awolowo University, Ile-Ife, and the University of Ibadan, Ibadan, Nigeria. Simple random sampling was adopted to select 40 library staff (librarians, heads of libraries, para-professional library staff, and ICT personnel) in each sampled university. Hence, the sample size consisted of 120 library staff of three first-generation public universities in South-West, Nigeria.

The instrument used for this study was a self-developed questionnaire, titled "Library Security Policy and Use of Electronic Security Systems Questionnaire (LSPUESSQ)". The questionnaire is divided into two parts. Part one focused on items that seek personal data of the respondents, such as gender, educational qualification, marital status, and library section/unit. Part two had sub-scales of the Library Security Policy Scale (LSPS) and Use of Electronic Security Systems Scale (UESS). The research instrument was validated using face, content, and construct validation by the experts in the Department of Measurement and Evaluation, University of Ibadan. The corrected copy questionnaire were administered to the respondents. The reliability, Cronbach's coefficient of 0.82 and 0.88, was found for the internal consistency of LSPS and UESS. Descriptive statistics of simple percentage, frequency count, mean, and standard deviation were used to answer all research questions. However, one hundred and nine (109) copies of the questionnaire were returned and found useful for answering research questions.

4. Results and Discussion

Research Question 1: What is the extent of usage of electronic security systems in academic libraries in South-West, Nigerian public universities?

Table 1: Mean Responses on the extent of usage of electronic security systems in academic libraries

S/N	Statements	VHE	HE	LE	VLE	MEAN ($\overline{X}$)	REMARK	Rank
1.	Close Circuit Television (CCTV).	60 (55.0)	30 (27.5)	9 (8.3)	10 (9.2)	3.28	High Extent	1st
2.	Electronic security gates	27 (24.8)	43 (39.4)	20 (18.3)	19 (17.4)	2.72	High Extent	5.5th
3.	Surveillance camera	18 (16.5)	41 (37.6)	27 (24.8)	23 (21.1)	2.50	High Extent	7.5th
4.	Perimeter alarm system	18 (16.5)	27 (24.8)	36 (33.0)	28 (25.7)	2.32	Low Extent	10th
5.	Digital camera	50 (45.9)	30 (27.5)	9 (8.3)	20 (18.3)	3.00	High Extent	3rd
6.	Fire Alarm System	47 (43.1)	31 (28.4)	12 (11.0)	19 (17.4)	2.97	High Extent	4th
7.	Smoke detection system	30 (27.5)	27 (24.8)	23 (21.1)	29 (26.6)	2.44	Low Extent	9th
8.	Electronic Eye	38	22	29	20	2.72	High Extent	5.5th

	Detection	(34.9)	(20.2)	(26.6)	(18.3)			
9.	Radio Frequency Identification	25 (22.9)	32 (29.4)	24 (22.0)	28 (25.7)	2.50	High Extent	7.5th
10.	Barcode scanner	41 (37.6)	40 (36.7)	20 (18.3)	8 (7.3)	3.05	High Extent	2nd
	Grand mean	**2.75**						

Key: VHE-Very High Extent, HE- High Extent, LE- Low Extent, Very Low Extent**. Note**: Mean value range from Mean value range from 0-1.5=Very Low extent, 1.6-2.5= Low Extent, 2.6-3.5= High Extent, 3.5-4.0= Very High Extent. Figures in parenthesis are percentages.

Table 1 presents the extent to which electronic security systems are used in academic libraries in South-West Nigerian public universities as only 8 out of 10 items presented were used to a high extent when considering the mean value and grand mean as against the threshold of 2.50. Only Close Circuit Television (CCTV) cameras, barcode scanner, digital camera and fire alarm system, with 3.28, 3.05, 3.00, 2.97, 2.72, 2.72, 2.50, and 2.50 mean score respectively, and ranked 1st, 2nd, 3rd, 4th, 5.5th, 5.5th, 7.5th and 7.5th. On the other hand, smoke detection system and perimeter alarm were all used to a very low extent in academic libraries in South-West Nigerian public universities. The report of this study is inconsistent with finding of Echem, and Okwu (2023) who adopted descriptive research survey design to investigate library security and sustainable services. The study revealed that smart card access control, door intrusion alarms, perimeter alarm system, installation of window burglary and panic alarm were implemented to a high extent. However, the finding disagrees with result of Nyemezu, Oladipupo, and Ejuh (2022) who found that the extent of utilization of electronic security systems in academic libraries is very low.

This result is also inconsistent with submission of Ezeabasili and Nwosu (2018) who studied the use of electronic security systems in safeguarding information resources in Federal University Libraries in the Southern part Nigeria. The researchers found that the available electronic security systems in university libraries sampled are not in regular use, while in the University of Nigeria, Nsukka, their available electronic security systems are no longer in use. Their study also revealed that RFID is not in use in any of these Federal University Libraries.

Research Question 2: What are the library security challenges encountered by academic libraries in South-West Nigerian universities?

Table 2: Library security challenges encountered by academic libraries

S/N	Statements	SA	A	D	SD	MEAN ($\bar{X}$)	Decision	Rank
1.	Poor funding to support the electronic security systems.	61 (56.0)	9 (8.3)	20 (18.3)	19 (17.4)	3.03	Accepted	2nd
2.	Failure universities' management to pay attention to the security needs.	69 (63.3)	17 (15.6)	16 (14.7)	7 (6.4)	3.36	Accepted	1st
3.	The electronic security systems are not in regular use.	8 (7.3)	71 (65.1)	29 (26.6)	2 (1.8)	2.80	Accepted	6th
4.	Inadequate technical skills to operate electronic security systems.	18 (16.5)	62 (56.9)	20 (18.3)	9 (8.3)	2.82	Accepted	5th

5.	Incompetent personnel to handle the electronic security systems	21 (19.3)	60 (55.0)	10 (37.3)	18 (2.0)	2.77	Accepted	7th
6.	Low Internet connectivity	30 (25.0)	50 (44.0)	10 (9.2)	19 (17.4)	2.83	Accepted	4th
7.	Poor maintenance	13 (11.9)	67 (61.5)	9 (8.3)	20 (18.3)	2.67	Accepted	8th
8.	System Failure	22 (20.2)	73 (67.0)	5 (4.6)	9 (8.3)	2.99	Accepted	3rd

Key: SA-Strongly Agreed, A- Agreed, D- Disagree, SD- Strongly Disagreed **Note**: Mean value range from range from 0-2.4= Low, 2.5-4.0= High. Figures in parenthesis are percentages.

Table 2 presents library security challenges encountered by academic libraries in South-West Nigerian public universities. From table 2, the major challenges faced by academic libraries in South-West, Nigerian public universities are failure of universities' management to pay attention to the security needs of the institutions, poor funding to support the electronic security systems, system failure, low Internet connectivity, and inadequate technical skills to operate electronic security systems by librarians. Other challenges are: the electronic security systems are not in regular use, Incompetent personnel to handle the electronic security systems, and poor maintenance of electronic security systems in South-West, Nigerian public universities. This finding supports the result of Gladness and Ibrahim (2025), who investigated the challenges facing Mzumbe University library and identifies personal, technical, management, and financial factors as the major challenges facing Mzumbe University library in operating the electronic security systems.

The submission of this study also aligns with finding of Echem and Okwu (2023) who identified, inadequate funding, inadequate staff, weak library security policy, non-challant attitude of staff, conspiracy between staff and patrons, inadequate staff training on security measures and poor lighting were identified as the major challenges for the delivery of effective library services in Donald Ekong Library, University of Port Harcourt.

Research Question 3: what is the level of effectiveness of electronic security systems in academic libraries in South-West, Nigerian universities?

Table 3: Level of effectiveness of electronic security systems in academic libraries

	VE	E	NVE	NC	Mean	Decision
Close Circuit Television (CCTV).	35 (32.1)	40 (36.8)	24 (22.0)	10 (14.7)	2.92	Effective
Electronic security gates	41 (32.4)	49 (50.7)	10 (8.8)	9 (4.4)	3.11	Effective
Surveillance camera	37 (27.2)	33 (44.1)	20 (13.2)	16 (11.0)	2.78	Effective
Perimeter alarm system	39 (37.5)	40 (47.1)	20 (8.8)	10 (3.7)	3.17	Effective
Digital camera	41 (52.2)	25 (33.1)	14 (10.3)	19 (2.2)	2.62	Effective
Fire Alarm System	29 (31.6)	51 (52.2)	11 (8.1)	18 (5.1)	2.83	Effective
Smoke detection system	39 (21.3)	51 (37.5)	10 (25.0)	9 (8.8)	3.10	Effective

Electronic Eye Detection	36 (33.8)	53 (46.3)	10 (14.7)	10 (3.7)	3.06	Effective
Radio Frequency Identification	30 (31.6)	35 (40.4)	30 (21.3)	14 (5.9)	2.74	Effective
Barcode scanner	18 (35.3)	40 (44.1)	22 (8.8)	21 (8.8)	2.36	NVE
Theft detect machine	41 (47.1)	48 (42.6)	11 (5.9)	9 (2.9)	3.11	Effective
Access control systems	40 (36.8)	39 (43.4)	16 (11.0)	15 (7.4)	2.97	Effective
Grand mean	2.90					

Key: VE-Very Effective, E- Effective, NVE-Not Very Effective. NC-Not Certain. **Note**: Mean value range from Mean value range from 0-1.5= Not Certain, 1.6-2.5= Not Very Effective, 2.6-3.5= Effective, 3.5-4.0= Very Effective. Figures in parenthesis are percentages

The Table 3 presents the result of effectiveness level of electronic security systems in academic libraries in South-West, Nigerian universities. All the items on the table were rated to be effective with highest frequency except item 10. For instance, Close Circuit Television (mean = 2.92); electronic security gates (mean=3.11); surveillance camera (mean=2.78); perimeter alarm system (mieain=3.17); Digital camera (mean=2.62); fire alarm system (mean=2.83); smoke detection system (imeian=3.10); Electronic Eye Detection (mean=3.06); Radio Frequency Identification (mean=2.74); barcode scanner (mean=2.36); theft detect machine (mean=3.11) and access control systems (mean=2.97). The entire mean values of the twelve items on the table weire accepted as rated above cut-off point of 2.50 except the item 10 that is, below 2.50 while the weighted average score is 2.90 which is greater than threshold of 2.50. This shows that level of effectiveness of electronic security systems in academic libraries in South-West, Nigerian universities was found to be high. The finding of this study contradicts the result of Abubakar and Aduku (2016) who emphasized that the ineffectiveness of electronic security systems is a common challenge in libraries, especially in developing countries, where funding and technical expertise are limited.

Research Question 4: What is the level of compliance with library security policies in South-West, Nigerian public universities?

S/N	Statements	VHE	HE	VLE	LE	MEAN ($\overline{X}$)	REMARK
1.	The library security policy serves as a guide in managing security issues.	36 (33.0)	44 (40.4)	15 (13.8)	14 (12.8)	2.84	High Extent
2.	Adhering to borrowing and returning of library materials to library users.	40 (36.7)	38 (34.9)	12 (11.0)	19 (17.4)	2.91	High Extent
3.	Library users should abide by the rules that relate to acceptable behaviour within the library	32 (29.4)	38 (34.9)	9 (8.3)	30 (27.5)	2.66	High Extent
4.	Refraining from engaging in disruptive activities in the library.	25 (22.9)	44 (40.4)	25 (22.9)	15 (13.8)	2.72	High Extent
5.	Respecting the rights of other library users in the library.	34 (31.2)	41 (37.6)	24 (22.0)	10 (9.2)	2.91	High Extent
6.	Complying with rules of using of ICT facilities guidelines.	39 (35.8)	44 (40.4)	19 (17.4)	9 (8.3)	2.89	High Extent

7.	Complying with policies related to the use of designated study areas.	30 (27.5)	48 (44.0)	10 (9.2)	21 (19.3)	2.80	High Extent
	Grand mean	**2.82**					

VHE-Very High Extent, HE- High Extent, LE- Low Extent, Very Low Extent Note: High Extent -2.50-4.00, Low Extent -below 2.50. Figures in parenthesis are percentages

Reports presented from Table 4 shows the level of compliance with library security policies in South-West, Nigerian public universities. The seven items on level of compliance with library securities policies had a grand mean score of 2.82 out of maximum obtainable 4.00. The obtained mean values for the items are as follows: the library security policy serves as a guide in managing security issues (mean=2.84); adhering to borrowing and returning of library materials to library users (mean=2.91); library users should abide by the rules that relate to acceptable behavior within the library (mean=2.66); refraining from engaging in disruptive activities in the library (mean=2.72); respecting the rights of other library users in the library (mean=2.91); complying with rules of using of ICT facilities guidelines (mean=2.89) and complying with policies related to the use of designated study areas (mean=2.80). All the items were all accepted when considering mean value of each item above the threshold of 2.50 while the grand mean of 2,82 was obtained when considering all the items as a whole. This indicated that the level of compliance with library security policies in South-West Nigerian public universities was on the high side. The result of this study relates to the finding of Emezaiwakpor (2023) who conducted a study on the effect of self-regulatory libraries and security in a university library environment in the university libraries in South-South Nigeria. The study found that users' compliance with library policies and emergency preparedness was in place.

5. Conclusion

The study concludes that electronic security systems, such as CCTV), barcode scanner, digital camera and fire alarm system in academic libraries were regularly used in Nigerian public universities. The study also concludes that users of public university libraries found to be in compliance with library security policies. The study also identified key challenges faced by academic libraries in South-West Nigerian public universities. Some of these challenges include: failure of universities' management to pay attention to the security needs, poor funding to support the electronic security systems, system failure, low internet connectivity, and inadequate technical skills to operate electronic security systems by librarians.

6. Recommendations

Efforts should be put in place by management of universities to sustain and maintain usage of electronic security systems in academic libraries. The study also recommended that the universities' management should fund academic libraries to address the challenges confronting public universities in South-West, Nigeria. Users of academic libraries should be forced to comply with library security policies in South-West, Nigerian public universities in order to prevent library and information resources from theft, damage, and unauthorized access. The study likewise recommends that library staff should be trained and retrained in order to keep upon maintain high level of effectiveness of electronic security systems in academic librWest, Nigerian universities.

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