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Library Electronic Security Systems and the Challenges of Theft and Mutilation of Library Resources in Academic Libraries in Nigeria: A Survey of Academic Libraries in Jigawa State

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Abstract

The study investigated Electronic Security Systems and the Challenges of Theft and Mutilation in two Academic Libraries in Jigawa State to determine the types of security systems used and challenges of theft and mutilation using a Descriptive Survey Design, the data collected was analyzed with descriptive statistics on SPPS 16.0 software. Census sampling technique was adopted on the total 94 library staff of FUD and SLU Libraries. Valid returned rate of 58(61.70%) questionnaires was used for the analysis. The study found out that FUD and SLU Libraries adopt and implement electronic security systems of CCTV Electronic Security System (mean=4.00), Network and Server Security System (mean=3.91) and RFID Transponder and Reader System (mean=3.89) to address the issues associated with theft and mutilation. The study also found out that conventional security systems adopted (mean=3.20) are used more than the electronic security systems (mean=2.34). Challenges of library security systems associated with issues of theft and mutilation (mean=2.92) is greatly affecting electronic security systems in academic libraries. The study recommends that libraries should install more electronic security systems and organize orientation exercise for users and staff on issues associated with library security.

Keywords: *Electronic Security System, Library Security, RFID System, Theft and Mutilation*

1.1 Introduction

The development of computer technology is constantly affecting library workflow which is being integrated into the library systems. Academic libraries across the globe are increasingly concerned with the safety and physical integrity of the readily available valuable intellectual properties within their collection. The security to the valuable intellectual collections associated with theft and mutilation has posed unbearable challenges to the library profession worldwide which has become a common phenomenon in libraries especially in academic libraries in Nigeria. The complex library security process can be accomplished

by the aligned operation of various interdependent components of the protection systems brought about by technological explosion. System components include different forms of the electronic RFID signaling system and the incident monitoring system of CCTV devices. Anunobi and Okoye (2008) submitted that, academic libraries are faced with hybrid challenges of managing library collections and acquiring necessary skills. Among the challenges include library security problems and the issue of disruptive behavior of print and non-print resources.

Electronic security systems are technological devices used with the aid of electrical gadgets, terminals and circuits to protect and secure library collections from incidence of theft and mutilation and the sudden disappearance of library resources. The concept of library security is referred to as mechanism and methods employed by library authority to guide or curtail the sudden disappearance of available intellectual resources from its original position to an unknown destination within or outside the library by staff or potential user. According to Maidabino (2010) the issue of collection security is of growing concern to university libraries and librarians. Theft of Library Resources is the process of illegal removals of any library resource by a potential user with or without the intention to return it. While Mutilation of Library Resources means the damages of library materials as a result of removal of a page or pages of a book or any other materials which eventually render such material less useful to other users.

Kumbhar and Veer (2016) submitted that the various library security technologies and systems available today include RFID, 3M Technology, Magnetic tackle tape, web cameras etc. and manual systems are surveillance, key and locks, surveillance, guards, lighting at late night etc. Academic libraries are libraries attached to institution of higher learning or tertiary institution such as universities, colleges of education, polytechnics and colleges of technologies. Crime and library security control in academic libraries have taken on a serious dimension by serious minded librarians. The increased accessibility to library collections by potential library users increased the threats of theft and mutilation. In many instances, the greater the financial value of the book the prospect of its vulnerability to theft. The statistics of book theft and losses are however, scanty, if not unknown, in Nigerian academic library.

David (2001) suggested that libraries should install electronic security system for providing protection against theft and mutilation of library collection. Electronic systems such as building alarm systems, access control systems, RFID, CCTV, alarms are modern electronic security systems needed to be installed in proper places all over library building. Even though, there are no available empirical statistics or loss estimations due to theft, mutilation and other collection security breaches in Nigerian academic libraries but there is indication that such breaches are visible and a sizeable number is experienced in most academic libraries in Nigeria. Poor security facilities within the libraries of public institutions that result to incessant pressure on the library by users who either steal or mutilate the library's collections posed a serious threat to the future integrity of these valuable collections. This leads to the loss of many valuable resources in our libraries. These types of large scale thefts and mutilation not only cost administration maintenance of security system but also result in the loss of library reputation and staff morale and the overall feeling of compromised personal safety in a the library.

This study is based on the need to improve the security management and strategies for the prevention of library's collection thefts and mutilation in Jigawa State. Hence, the study becomes valuable in

addressing the strenuous problems related to security measures to be adopted in preventing theft and mutilation of library collections as its findings will be used by library authorities to rendering solutions to the problems of security management and strategies in Academic Libraries. The recommendations of this study will serve as foundations for further research in the same topic but at a comparative and wider level and will also add to body of literature in library security services.

However, it is against this background and inadequate documented empirical evidence that the present study become imperative so as to investigates the extent of security threats on the libraries' collection in Federal University Dutse Library and Sule Lamido University Library in order to demonstrate the relationships between good library security system and the preservation of the integrity of library resources to formulate effective and research – based policies and theories.

1.2 Statement of the Problem

Academic libraries are traditionally built to meet the needs of researchers, students, lecturers and the institutions' communities through the provision of reliable, qualitative and adequate information resources and services. However, library's intellectual collections stored in different media are being destroyed due to sudden disappearance; inadequate protection; stealing and mutilation of this rare collection, the strategies for prevention of incessant thefts and mutilation of information resources in academic libraries in Nigeria are posing a great problem especially in the area of library resources theft and mutilation.

The problems of sudden disappearance, non-return of items by borrowers and personal theft (from both staff and users) seem to be the growing problem of academic libraries in Nigeria. This has caused a serious problem which needs further empirical investigation and study to unravel the problems and suggest ways library can go to a far reaching extent in solving it. It is against this stated problem that it becomes necessary to examine the Library Electronic Security System and the Challenges of Theft and Mutilation of Library Resources in Academic Libraries in Jigawa State.

1.3 Objectives of the Study

The broad objectives of this study are to examine the level of Library Electronic Security Systems and the Challenges of Theft and Mutilation of Library Resources in Academic Libraries in Jigawa State. Specifically, the work is designed to:

1. Investigate the different types of electronic security systems used in academic libraries in Jigawa State;
2. Determine the means through which library resources are being stolen or mutilated in Academic Libraries under study;
3. Examine the level of security measures taken by Academic Libraries in Jigawa State to safeguard their collections;
4. To investigate the possible challenges of Security Systems associated with theft and mutilation of Library Resources;

2.1 Review of Related Literature

2.2 The Concept of Library Electronic Security Systems

Library Security is referred to as all strategies employed to ensure the availability, continuity, accessibility and longevity of library collections in order to provide effective services its user community. Library Security is an important and complex challenge in an academic library. Maidabino (2010) asserts that the issue of collection security is of growing concern to university

libraries and librarians. An academic library in particular, strikes to provide information resources in both print and non-print to support the educational services of the university community and the humanity at large.

Berek (2016) defined Electronic Security System as system connected to the integrated library system which brings a completely independent theft protection into effect through provision of unique identification of books or other documents. This system assist libraries to control, minimize or avoid library material theft and unethical losses. Examples of electronic security systems used by academic libraries are Radio Frequency Identification (RFID) system (both Transponder and Reader), electronic surveillance camera (CCTV), Fire/Smoke sensor, moisture sensor, 3M electronic security exit detector, perimeter alarm system, etc. Berek (2016) also emphasize library Security System for the safety of the library's collection is realized in three forms: preservation, preventive protection and recovery protection. Mwantimwa (2007) defined Electronic Security Systems as electronic devices such as motion detectors, alarm systems, and closed circuit television, RFID employed increasingly for after-hours security. Other electronic security systems include hardware, software and library network security, physical and environmental security system.

According to an empirical research by Osayande (2011) who studied electronic security systems in academic libraries in three university libraries in South-West Nigeria. The study found out that the three institutions under study have an electronic security system installed in their libraries. 28 respondents from Babcock University (100%) confirmed that CCTV camera is in the library, while 29 (100%) and 24 (100%) respondents from Covenant University and the University of Lagos respectively agreed that 3M electronic security system gates are installed in their libraries. The study further concludes that there is an electronic security system installed in the academic libraries of the three institutions under study for the protection and management of library resources.

Yeh and Chang (2007) opined that physical and environmental security is engrossed in library electronic security system which encompasses measures taken to protect library systems, buildings and related supporting infrastructures or resources (including air conditioning, power supply, water supply and lighting) against physical damage associated with fire, flood and physical intrusion. Hardware and software security systems are equipment needed to secure all available database and other storage media from any threats including thefts, unnecessary system failures, equipment incompatibilities, and ensure the availability and integrity of library collections. Ranawella (2006) suggested that libraries that install RFID reduce incidence of theft in the library.

2.4 Theft and Mutilation of Library Resources in Academic Libraries

In order for the need of academic libraries to provide, maintain and secure its collections to ensure the availability, accessibility and longevity of the collections, as well as to provide effective services to user community therefore, however, academic librarians must identify the security issues as they relate to their libraries. According to Akor (2013) who cited McComb (2004) stated that video surveillance and closed-circuit television (CCTV) systems serve as a way to monitor and record security, deter crime, and ensure safety and suggest that, libraries can use CCTV to identify visitors and employees, monitor work areas, deter theft, and ensure the security of the premises and other facilities. The CCTV system can also be used to monitor and record evidence on

clientele and employee misconduct. In the same vein Ramana (2010) contributed that "Closed Circuit Television (CCTV) uses in the libraries can enhance the ability to control the book thefts and tearing off the pages from the books and magazines".

A number of studies have been done describing how crimes and security breaches incidence has affected the provision of library services to users. According to Oyewusi and Oyeboade (2009), the importance of access to collections of libraries is a supporting mission of universities. This submission signifies an objection to the concept of closed access to all collections on the grounds of security, the principal reasons being theft, misplacement of library materials combined with increased wear and tear. If security is poor, then it is likely that clientele will steal. Several reasons are attributable to these security breaches in academic libraries. According to Akor (2013), it was also discovered that various methods were adopted for stealing and mutilating of the library books which include: tearing of book pages off, removing of the book jacket cover, hiding of books under their clothes and their pockets.

Osayande, (2011) studied electronic security systems in academic libraries in three university libraries in South-West Nigeria found out the different ways in which library materials are illegally taken away from the library. The study concludes that some patrons out-rightly steal library books. 49 respondents (60%) believed that concealing books in their clothes is a sure way for patrons to smuggle books out of the library that does not have a 3M security gate. 37 respondents (46%) believed that fooling security checks is another way to remove library materials illegally.

The basic aim of the security system in any academic library should be to provide a safe and secure environment for library staff, library resources and equipment, and as well as the potential library users. Consequently, this security system must perform their functions with less double-standard as possible, and also without devaluing the library's main objective of providing patron services with ease. This study explores Library Electronic Security System and the Challenges of Theft and Mutilation of Library Resources in Academic Libraries in Jigawa State that include the Federal University, Dutse Library and Sule Lamido University, Kafin-Hausa Library for the prevention and management of theft and mutilation to curb security infringement.

3.1 Methodology

The research design for this study was a Descriptive Survey Design; data gathered in this study were analyzed with descriptive statistics of mean and standard deviation on SPSS software. The choice of the descriptive survey design for this study was appropriate because it describe the numerical phenomenon of security challenges of academic libraries collections. All library staff of the Federal University Dutse and Sule Lamido University Kafin-Hausa University Libraries constitute the population of the study. The population of the study is 94 library staff made up of 74 staff from Federal University Dutse Library and 20 staff from Sule Lamido University Library. The two academic libraries were purposively sampled for this study even though there are other polytechnics and colleges academic libraries in the state, their mode of operation and management appears to be similar with similar policy and program for staff training on library security. Therefore, the study decided to sample the two libraries because of the availability of large collection and complex nature of library users.

The research instrument adopted for data collection is the questionnaire structured and designed on 4 point Likert Scale to obtain extent of acceptance or rejection of a

particular item. The study uses a decision to accept any statement with a mean mark above 2.5 and reject those below it.

4.1 Data Analysis and Interpretations

4.2 Demographic Analysis

Table 1: Gender and Name of Library of Respondents

Items	Gender of Respondents		Total	Valid Percent
	Male	Female		
Federal University, Dutse University Library	36	8	44	75.90
Sule Lamido University, Kafin-Hausa University Library	11	3	14	24.10
Valid Percent	81.00	19.00		100.00
Valid Total	47	11		58 (61.70%)
Missing		36 (38.30%)		
Total		94		

Table 1 above revealed the analysis of gender and name of library of the respondents. A total 94 questionnaires were distributed and the analysis revealed 36 (38.30%) of the questionnaires were returned unfilled and missing while 58 (61.70%) questionnaires were retuned and found useful which was used for the analysis in this study. FUD Library had a returned rate of 44 (75.90%) questionnaires while SLU Library had 14 (24.10%) questionnaires. Majority 47 (81.00%) of the valid respondents were male and female constitutes only 11 (19.00%) of the response rate.

Table 2: Department of Respondent

Department	Frequency	Percent	Valid Percent
Collection Development Department	5	5.3	8.6
Technical Services Department	12	12.8	20.7
Readers' Services Department	19	20.2	32.8
Research and Documentation Department	3	3.2	5.2
Serials Department	6	6.4	10.3
E-Library and Media Online	13	13.8	22.4
Valid Total	58	61.7	100.0
Missing	36	38.3	
Total	94	100.0	

The analysis on table 2 above shows the department of respondents which is an indication that all the major departments of the libraries are adequately represented. The results revealed that Readers' Services Department have the highest returned rate with 19 respondents representing 32.80% of the valid returned rate followed by E-Library and Media Online with 13 (22.4%), Technical Services Department 12 (20.70%) responses while CDD and Serials Department have 5 (8.6%) and 6 (10.3%) responses respectively.

4.2 Descriptive Statistics Analysis

Research Objective One: To investigate the different types of electronic security systems used in academic libraries in Jigawa State;

Table 3.1: Descriptive Statistics of Electronic Security Systems

S/No	Electronic Security System	N	Mean	Std. Deviation	Decision
1	Fire /Smoke Sensor	58	3.6379	.61268	**Accepted**
2	Security Gate Detector	58	3.6552	.47946	**Accepted**
3	Biometrics and Smart Cards System	58	1.0000	.00000	Rejected
4	CCTV Electronic Security System	58	4.0000	.00000	**Accepted**
5	Network and Server Security System	58	3.9138	.28312	**Accepted**
6	Hardware and Software Security System	58	1.6379	.48480	Rejected
7	Moisture and Glass Breaker System	58	1.0000	.00000	Rejected
8	RFID Transponder and Reader system	58	3.8966	.30720	**Accepted**
9	Electronic Recording and Humidity System	58	1.0000	.00000	Rejected
10	Patron self-check-out station	58	1.0000	.00000	Rejected
11	RFID Book Drop System	58	1.0000	.00000	Rejected
	Valid N (listwise)	58			

The analysis on table 3 above represents the different types of Electronic Security Systems. From the analysis presented, Fire and Smoke Sensor Electronic Security System with (mean=3.63), Security Gate Detector (mean=3.65), Network and Server Security System (mean=3.91) and RFID Transponder and Reader System (mean=3.89) are the only Electronic Security System adopted for the management and protection of collections from challenges associated with theft and mutilation. While all the respondents rated that CCTV electronic security system is available in both FUD and SLU libraries. Biometrics and Smart Cards System, Hardware and Software Security System, Moisture and Glass Breaker System, Electronic Recording and Humidity System, Patron self-check-out station and RFID Book Drop System as unavailable in the libraries, because their mean marks are 1.00 each all the respondents agreed they are not available.

This analysis further revealed that about five electronic security systems were adopted and utilized by the two academic libraries under study for the protection of library collection against the incidence of theft and mutilation. The CCTV system found in these libraries can also be used to monitor and record evidence on clientele and employee misconduct and record security, deter crime and ensure safety. In the same vein Ramana (2010) contributed that Closed Circuit Television (CCTV) uses in the libraries can enhance the ability to control the book thefts and tearing off the pages from the books and magazines.

Table 3.2: Descriptive Statistics of Conventional Security Systems

S/No	Conventional Security System	N	Mean	Std. Deviation	Decision
12	Locks and Key system and presence of Security guards for checks at the entrance	58	3.9310	.25561	**Accepted**
13	Installing grills on windows	58	3.3448	1.19284	**Accepted**
14	Single door entry-exit for both staff and users	58	3.8966	.44681	**Accepted**
15	Observation by library staff and Physical checking on patron all-round the library	58	2.8448	1.26771	**Accepted**
16	Severe sanctions and punishment of offenders	58	3.3966	.87739	**Accepted**
17	Affordable photocopying machines and provision of multiple copies of library resources	58	1.8448	1.19651	Rejected
	Valid N (listwise)	58			

Table 4 above revealed the descriptive statistics of the convention library security systems adopted for the protection library collections. From the analysis, it was revealed that only item 17 that is Affordable photocopying machines and provision of multiple copies of library resources is rejected as not among the conventional security systems adopted (mean=1.84). Item 12, 13, 14, 15 and 16 with mean=3.93, mean=3.34, mean=3.89, mean=3.84 and mean=2.84 respectively are all accepted as the conventional security systems adopted by FUD and SLU libraries for the protection and management of security problems associated with theft and mutilation. All the mean marks are above the 2.5 bench mark.

Table 3.3: Grand Mean Score of the Two Library Security Systems

Descriptive Statistics				
Grand Mean of Systems	**N**	**Mean**	**Std. Deviation**	**Status**
Electronic Security System adopted	58	2.3401	.13142	Insignificant
Conventional Security System adopted	58	3.2098	.70887	**Significant**
Valid N (listwise)	58			

Table 3.3 above represent the grand mean score of the Electronic Security Systems and the Conventional Security Systems which revealed that the mean score of electronic security systems adopted and used in the libraries appears to be insignificant with a total grand mean score of 2.34 below the 2.50 bench mean mark. While the grand mean score of the conventional security systems adopted in the libraries is 3.20 mean mark, appears to be significant because the mean score is above the bench mean mark. This analysis is an evidence that electronic security systems is least adopted in the libraries for the protection of incidence and challenges of theft and mutilation.

Research Objective Two: To determine the means through which library resources are being stolen or mutilated in Academic Libraries under study;

Table 4: Possible Stealing/Mutilating Methods of Library Users

S/No	Stealing/Mutilating Method	N	Mean	Std. Deviation	Decision
18	Hidings library materials inside dress and concealing small books inside note-books	58	2.7586	.97891	**Accepted**
19	Tearing some important pages of the library material	58	3.7586	.43166	**Accepted**
20	Escaping with materials at library closing hours when there is a rush or throwing it through the windows	58	3.0345	.79396	**Accepted**
21	Erasing library identifications on the materials, removing the book jacket or book cover	58	2.4138	.91832	Rejected
22	Connivance or collaboration with library staff	58	2.1552	.81223	Rejected
23	Impersonation by library patrons with fake library tickets to borrow library resources	58	3.1724	1.23029	**Accepted**
	Valid N (listwise)	58			

Table 4 above shows the descriptive analysis of means of stealing and mutilating library materials by users. From the analysis, it revealed that items 18, 19, 20 and 23 are the possible stealing/mutilating methods of users with mean=2.75, mean=3.75, mean=3.03 and mean=3.17 respectively. The analysis further revealed that Erasing library identifications on the materials, removing the book jacket or book cover (mean=2.41) and Connivance or collaboration with library staff (mean=2.15) are rejected as possible stealing and/or mutilating methods of users. This therefore shows that staff of the libraries are not conniving with users in committing crime or users erasing identifications on library collections.

Research Objective Three: To examine the level of security measures taken by Academic Libraries in Jigawa State to safeguard their collections;

Table 5: Descriptive Statistics of Security Measures Taken

S/No	Security Measures	N	Mean	Std. Deviation	Decision
24	The provision of cheaper photocopying to reduce the incidence of theft and mutilation	58	2.7414	.92831	**Accepted**
25	Use of RFID systems on library resources in addition to security men for thorough surveillance of the entire library	58	2.9483	1.17611	**Accepted**
26	The provision of multiple copies of m aterials have protected the collections	58	3.3276	.86629	**Accepted**
27	The using of the electronic security systems of library security measures have reduced the occurrences of theft and mutilation	58	3.9310	.36812	**Accepted**
28	Proper provision of sanctio ns and penalties to offenders have reduce theft and mutilation	58	3.4138	.91832	**Accepted**
29	User enlightenment campaigns on dangers of theft and mutilation during library exhibitions and orientations is an effective strategy.	58	3.8793	.42209	**Accepted**
30	Digitization of library collection and provision of enough computer systems in the library is a security strategy to reduce the incidence	58	2.2069	1.15103	Rejected
31	Moving all library collections into close access will reduce the incidence of theft and mutilation	58	1.6379	.85221	Rejected
	Valid N (listwise)	58			

Table 5 above represent the analysis of the measures taken by the libraries to safeguard their collections. It was revealed that items 24, 25, 26, 27, 28 and with mean=29 2.74, mean=2.94, mean=3.32, mean=3.93, mean=3.41 and mean=3.87 respectively are accepted as security measures adopted by the two libraries to address the issue of library security associated with theft and mutilation of resources. While the analysis of item 30 (mean=2.20) and item 31 (mean=1.63) are rejected based on the decision rule of the study.

Research Objective Four: To investigate the possible challenges of Security Systems on theft and mutilation of Library Resources;

Table 6: Possible Challenges of Security System on Theft and Mutilation

S/No	Challenges	N	Mean	Std. Deviation	Decision
32	Limited of materials that lead to Selfish interest on the part of users in taking away the library's resource and/or mutilating due to lack of surveillance	58	3.2759	.66999	**Accepted**
33	Lack of utilizing proper and appropriate electronic security systems in strategies areas in the library lead to theft and mutilation	58	3.8103	.47598	**Accepted**
34	Lack of literate or skilled personnel to check the incidence of theft and mutil ation and proper monitoring of the circulation and reading areas around the library	58	2.2414	1.09721	Rejected
35	Late arrival of collections and improper place to keep rare and delicate collections of libraries increase the incidence of theft and mutilation	58	2.2759	1.08891	Rejected
36	Department heads keeping books in their offices which is an evident of non -commitment of library leadership in tackling issues of library security challenges	58	2.5345	1.02966	**Accepted**
37	Failure of hardware and soft ware security system due to insufficient systems and lack of steady power supply	58	2.9483	.71137	**Accepted**
38	Inadequate library security policies for protection and management of library's collection	58	2.8448	.89446	**Accepted**
39	Non-utilization of mod ern library security technology such as CCTV cameras, security doors, etc. posed a serious challenge to libraries	58	3.1379	.80455	**Accepted**
40	The library cannot afford to acquire more telecommunication security systems to cover the entire building due to lack of adequate funding	58	3.6552	.66363	**Accepted**
41	Lack of user awareness of what constitutes some security breaches leads to theft and mutilation of library resources	58	2.5690	1.14113	**Accepted**
	Valid N (listwise)	58			

From the analysis on table 6 above, it reveals that Item 32, 33, 36, 37, 38, 39, 40 and 41 are accepted as the possible challenges of theft and mutilation in regards to library security systems. The items have the following scores mean=3.27, mean=3.81, mean=2.53, mean=2.94, mean=2.84, Mean=3.13, mean=3.65 and mean=2.56 respectively are accepted as possible challenges of library security associated with theft and mutilation of library resources. While Item 34; lack of literate or skilled personnel, proper monitoring of the circulation and reading areas around the library (mean=2.24) and item 35; late arrival of collections and improper place to keep rare and delicate collections of libraries (mean=2.27) are not the possible challenges associated with the incidence of theft and mutilation of library collections.

Table 6.1: Grand Mean of Measures taken and Possible Challenges of Theft and Mutilation

Descriptive Statistics				
Mean of Items	**N**	**Mean**	**Std. Deviation**	**Status**
Measures taken on Security System	58	3.0108	.65154	**Significant**
Challenges of Security System	58	2.9293	.78069	**Significant**
Valid N (listwise)	58			

This descriptive analysis presented on table 6.1 above revealed that the grand mean score of the measures taken by the libraries to safeguard their collection from the incidence and the challenges associated with theft and mutilation of library resources. The analysis shows that the grand mean scores appears to be significant (mean=3.01 for measures taken and mean=2.92 for challenges) which are above the 2.50 bench mean score. Therefore, from the analysis presented, is appears that the combination of both electronic and conventional security measures is a necessary prerequisite for the protection and safeguarding of library resources from the incidence and challenges of theft and mutilation of library resources. While the analysis also revealed that most of the library staff agreed on the challenges associated with theft and mutilation affect library security systems.

This finding corroborates Kumbhar and Veer (2016) Study of Security System used in private aided College Libraries in Maharashtra, India. The security systems are both traditional and modern technology based systems. The findings of their study revealed majority of college libraries have applied traditional routine general security systems due to lack of funds.

5.1 Summary and Discussion of major findings of the study

The study adopted the descriptive survey to explore the Library Electronic Security Systems and the Challenges of Theft and Mutilation of Library Resources through a structured questionnaire containing 41 items distributed to FUD and SLU Library staff in Jigawa State have the major findings to include the following:

5.2 Electronic and Conventional Library Security Systems

The study sought to explore the electronic security systems adopted for safeguarding library resources from the challenges of theft and mutilation. The findings show that CCTV electronic security system (mean=4.00), Fire and Smoke Sensor Electronic Security System (mean=3.63), Security Gate Detector (mean=3.65), Network and Server Security System (mean=3.91) and RFID Transponder and Reader System (mean=3.89) are the only Electronic Security System adopted for

library security management for the protection of collections from challenges of theft and mutilation. This finding corroborates Ramana (2010) who contributed that Closed Circuit Television (CCTV) uses in the libraries can enhance the ability to control the book thefts and tearing off the pages from the books and magazines.

While Locks and Key system and presence of Security guards (mean=3.93), Single door entry-exit for both staff and users (mean=3.89) and Observation by library staff and Physical checking on patrons (mean=3.84) are the accepted as the conventional security systems. Biometrics and Smart Cards System, Hardware and Software Security System and RFID Book Drop System are not among the Electronic Security Systems in the libraries. The findings are in line with the study of Bansode & Desale (2009) who stress on key lock, guard, surveillance, lighting in campus, window and doors, Physical checking along with electronic security systems.

The electronic security system found in the libraries include:

1. The Closed-Circuit Television (CCTV) electronic security system used to monitor and record evidence on clientele and library staff misconduct and deter crime.
2. Fire/Smoke Sensor Electronic Security System: this system detects incidence of fire outbreak immediately before it become pervasive in order to take necessary measures.
3. Network and Server Security System: This system protect Network and Computer Servers from any unauthorized utilization, intrusion, hardware or application failure due to viruses and hackers.
4. RFID Transponder and Reader System: Anti-theft part of the Library RFID Management System using RFID tags embedded in library items. The alarm will sound and lights on the gate will flash as patron passes through with the un-borrowed library material.
5. While the conventional systems include Locks and Key system, presence of Security guards, Single door entry-exit for both staff and users and Observation by library staff.

5.3 Possible Stealing and/or Mutilating Methods of Library Users

The study found out among the possible stealing and/or mutilating methods used by students as hidings library materials inside dress while concealing small books inside note-books (mean=2.75), tearing some important pages (mean=3.75), escaping with materials or throwing them through the windows at library closing hours when there is a rush (mean=3.03) and impersonation by library patrons with fake library tickets to borrow library resources (mean=3.17). The study further found out that erasing library identifications on the materials, removing the book jacket or book cover (mean=2.41) and Connivance or collaboration with library staff (mean=2.15) are not among the possible stealing/mutilating methods of users. This finding corroborates Bansode and Desale (2009) who stress on key lock, guard, surveillance, lighting in campus, window and doors, Physical checking along with electronic security systems

Therefore, the possible stealing methods of users can be summarized as follows:

1. The hidings of library materials inside dress and concealing small books inside note-books especially during rush hours.
2. The tearing of some important pages and escaping with other materials or throwing them through the windows at library closing hours.
3. The impersonation by library patrons with fake library tickets to borrow

library resources.

5.4 Security Measures Adopted by the Libraries

The major findings of the security measures adopted by the libraries are significant while using both the electronic and the conventional security systems. The findings show provision of cheaper photocopying (mean=2.74), use of RFID systems on library resources in addition to security men for thorough surveillance of the entire library (mean=2.94), provision of multiple copies of materials (mean=3.32), using of the electronic security systems (mean=3.93), proper provision of sanctions and penalties to offenders (mean=3.41) and enlightenment campaigns on dangers of theft and mutilation during library exhibitions and orientations (mean=3.87) as effective security strategies adopted. The study also found out that digitization of library collection and provision of enough computer systems in the library (mean=2.20) and moving all library collections into close access (mean=1.63) will not reduce the incidence of theft and mutilation and therefore ineffective security measures to be adopted.

In summary, the strategies adopted to safeguard library resources from the incidence of theft and mutilation include:

1. The provision of multiple copies of materials to make rear and constant demand resources readily available to users as at when due.
2. The utilization of RFID systems on library resources in addition to security men for thorough surveillance and proper provision of sanctions and penalties to offenders
3. Enlightenment campaigns on dangers of theft and mutilation during library exhibitions and orientations.

5.5 Possible Challenges of Library Security System Associated with Theft and Mutilation

This study sought to find out the possible challenges of library security systems on addressing the issue of theft and mutilation of library resources in academic libraries in Jigawa State. The study found out that limited materials lead to Selfish interest users to steal and/or mutilate resources (mean=3.27), lack of utilizing proper and appropriate electronic security systems in strategies areas in the library (mean=3.81) and inadequate library security policies for protection and management of library's collection (mean=2.84) are among the possible challenges of library security systems associated with the issue of theft and mutilation.

Therefore, the possible challenges of library security on the issue of theft and mutilation are:

1. Hardware and software security systems failure and limited materials in the libraries are leading Selfish interest users to engage in theft and mutilation of resources.
2. Lack of utilizing proper and appropriate electronic security systems in strategies areas in the library, heads of units keeping books in their offices are evident of non-commitment of library leadership in tackling issues of library security challenges.
3. Inadequate library security policies for protection and management of library's collection are among the possible challenges of library security systems on addressing the issue of theft and mutilation.

5.6 Implication of the Study

This study has a great implication to library security management. This is because library security system is the most important management tool to prevent damage of knowledge resource. This study found out that students have sophisticated means of stealing and mutilating library collections such as concealing small books, tearing some pages and impersonation. These all posed a threat to security of library collections. Only adequate electronic security measures can be adopted to address this issue properly. This study found out that adoption and utilization of electronic security systems appears to be insignificant (mean=2.34) compared to the conventional systems (mean=3.20) which is significant. It is the responsibility of the library to adopt and implement best security system and measures. Another implication of the study is that most of the library staff agree that the challenges of library security systems associated with the issue of theft and mutilation is greatly affecting the library security systems since the study found out that the libraries are using more conventional than electronic security systems.

Conclusions and recommendations of the Study

Based on the findings of the study, this study concludes that Federal University, Dutse and Sule Lamido University libraries adopt electronic security system of Closed-Circuit Television (CCTV) system, Network and Server Security System and RFID Transponder and Reader System to address the issue of library security associated with theft and mutilation of library resources posed by library users. The study also concludes that Biometrics System, Hardware and Software Security System and RFID Book Drop Electronic Security System are yet to be adopted by academic libraries in addressing security problems associated to theft and mutilation of library resources. The study further concludes that conventional security systems adopted and implemented by the two libraries are lock and key, staff surveillance and single door entry-exit for both staff and users and that the challenges of library security systems associated with the issue of theft and mutilation is greatly affecting electronic security systems in academic libraries.

Based on the findings, the study therefore recommends the following:

1. The study recommends that academic library management should install more electronic security systems and devices to manage and reduce security problems especially those associated to theft and mutilation.
2. Constant orientation exercise of users and staff should be done at least twice a year on issues relating to library security and challenges of theft and mutilation.
3. Policy formulation on effective library security systems and those that will guide against every form of theft and mutilation of library resources should be provided.
4. Libraries intending to implement electronic security systems should have undivided attention to library work processes and service activities. They should put into consideration not to inhibit or complicate the library staff and library users' activities.

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