

# EVALUATIVE STUDY OF PRESERVATION AND USE OF INFORMATION RESOURCES IN UNIVERSITY LIBRARIES IN NIGER STATE, NIGERIA.

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## **Abstract**

*This study evaluated preservation and use of information resources in two university libraries in Niger State, Nigeria, namely: Ibrahim Badamasi Babangida Library in Federal University of Technology, Minna and Abubakar Gimba Library in Ibrahim Badamasi Babangida University, Lapai. Questionnaire was used to collect data from sixty-six (66) professional and para-professional staff from the two university libraries. The data collected were analysed using mean scores and standard deviation. Natural disasters, human, chemical, biological and environmental factors were responsible for deterioration of information resources in the university libraries. Photocopying, re-binding, fumigation, microfilming, lamination, air conditioning and digitization techniques were adopted for preservation of information resources and books were mostly borrowed and consulted in the libraries. Based on the findings, the study recommended that management of the universities should acquire a variety of information resources which should not be limited to books, serials, reference sources but to include e-resources.*

**Key words:** *Information Resources, Preservation, University Libraries, Use, Niger State.*

## **Introduction**

Information resources are all the library materials found in the library to serve the library users for the purpose of satisfying their information needs. Udoudoh (2012), described information resources as the summation of all carriers of information of diverse areas/needs which the library provides for her clientele. Deterioration can be defined as a state in which the efficacy

of library information resources is being worsened, declined, weakened and depreciated. Preservation of library materials is a field encompassing not only books, but maps, prints, and photographic paper documents of diverse types, microfilms, motion pictures, tapes and disc recordings, software and computers.

Preservation is the art of protecting and safeguarding information resources from been deteriorated. Ogunniyi & Adejube, (2014) defined preservation as the art of controlling risk to the intellectual and physical heritage of a community. Preservation techniques are methods used for preservation of information resources in the libraries. Techniques used in preserving print resources such as textbooks, serial publications, government documents and reference materials in libraries include: Cleaning and dusting, photocopying, re-binding, lamination, fumigation, shelving to allow free air flow, air conditioning, etc while techniques used for preservation of non-print resources like electronic and audio-visual resources include: digitization, use of hard disc and flash disc, microfilming, air conditioning, cleaning and dusting, standard shelves, cabinets, boxes, vertical files etc.

Use of information resources is the act of library users to exploit library resources. Use of library and its materials are vital factors in ascertaining the effectiveness of services provided by libraries. Use of information resources is concerned with the exploitation of variety of information resources in the academic environment. Such resources include print, non- print and electronic materials such as online books, journals, theses, and dissertations, online newspapers, magazines, indexes/abstracts, online databases, online encyclopaediae and dictionaries etc. A better understanding of library use and its materials would enable libraries to improve in acquiring resources and service delivery to its users. Omotayo (2010) defined use

as the capacity of academics or researchers to exploit and conform technologies to overcome a purpose or set goals.

### **Statement of the Problem**

University library is a repository of information resources for the educational development of citizenry at tertiary level with its significant contributions to the academic achievement of lecturers and students in tertiary institutions. Preservation has become a pressing issue and of interest for librarians all over the world as they realise the need to preserve the world's memories. University libraries in Niger State just like those in other parts of the country are established primarily to meet the information needs of their user communities through collection and preservation of information resources to support teaching, research and dissemination of knowledge. For these resources to serve the purpose for which they are collected, they need to be preserved in such a way that their life span is prolonged so as to sustain their use by the academic communities. Unfortunately, some information resources available in the two university libraries have deteriorated due to several factors and this can hinder the long term access to them when they are needed by library users and likely to reduce the life span of these library resources. It is in the light of the above that, this study is carried out.

### **Objectives of the Study**

The objectives of the study are to:

1. find out the causes of deterioration or damages done to information resources in university libraries in Niger State.

2. ascertain the techniques adopted for preservation of information resources in university libraries in Niger State;
3. determine the type of information resources used in university libraries in Niger State;

### **Research Questions**

This study would provide answers to the following research questions:

1. What are the causes of deterioration or damages done to information resources in university libraries in Niger State
2. What are the techniques adopted for preservation of information resources in university libraries in Niger State?
3. What type of information resources used in university libraries in Niger State?

### **Literature Review**

University libraries refer to those libraries established in universities to support and strengthen the academic programmes of such institutions of learning as it contributes to the total development of its user's community by broadening their intellectual horizons and inculcating in them a lasting desire to study and carry out research. However, all these could be possible if the relevant information resources are available in the library. The main functions of university library is to acquire, organize, preserve and disseminate information. Oyewusi and Oyeboade, (2009) defined university libraries as the academic heart of the university system and its basic purpose is to provide students and faculty with material assistance and enabling environment that facilitate teaching, learning and research activities in the universities.

Information resources found in university libraries are made up of print and non-print resources. Olanlokun and Salisu cited in Udoudoh (2012) grouped information resources into two distinct groups, the printed and non-printed formats.

**Printed Formats:** These are information in the printed format which can be used for study, research, reading, ect. they are textbooks, journals, magazines, newspapers, reference materials, treaties, monographs, government documents, conference papers, manuscripts, pamphlets, past examination question papers etc. **Non-Printed Formats:** These are carriers of information which are not in printed format. They are product of advanced technology which needs special equipment for their usage.

Collectively they are called electronic and audio-visual resources which require both sense of auditory and visual to use them. **Electronic:** These are computer based information resources available in the library. Examples of electronic resources are computers, compact disk read-only memory (CD-ROMs), digital video disc (DVDs), electronic books, electronic journals, electronic texts etc. **Audio:** These are information resources which require only senses of auditory for their use. Examples of such information resources are sound recordings, audio-tapes, audio cassettes etc. **Visual:** These are information resources which require only senses of visual for their use. Examples of such information resources are microfilms, microfiche, ultra-fiche, micro-card, filmstrip, transparencies, slides, VCD and DVD etc. **Audio-visual:** These are information resources which require both senses of auditory and visual for their use. Examples of such information resources are tape/slide programmes, videotapes, sound films, video cassettes and video discs etc.

In library perspective, deterioration can be defined as a state in which the efficacy of library information resources is being worsened, declined, weakened and depreciated. The causes of

deterioration of library information resources is as old as library itself and it begins immediately as paper was invented and the writing started. Madu and Adeniran cited in Olajide (2013), opined that the entire record compilation is decaying at the present, it decays as days gone by and likewise it will continue to decay tomorrow. At the moment, a lot of conditions that make information resources to decay are human, environmental, biological and chemical factors. Deterioration is being caused by some enemies of information resources and this can be grouped into inborn precariousness of the materials/inside variables and external variables.

Ogunniyi and Adejube (2014) investigated the strategies for curbing deterioration of library materials in selected Colleges of Education libraries in Southern Nigeria. It was discovered that the most prominent incidences of deterioration were broken spine of projects, vandalism and mutilation of the projects. Furthermore, results showed that none of the libraries has digitized the undergraduate projects.

Adekambi and Wahab (2015) investigated comparative analysis of the preservation and conservation techniques of selected special and academic libraries in Nigeria. The study found out the causes of deterioration in both special and academic libraries were dust, wear and tear, excessive photocopying, pests and excessive light, frequent use of material, magnetism and biological agents. The results showed among others that both special and academic libraries adopted cleaning and dusting, shelving to allow free flow of air, security systems, de-acidification, technology preservation, refreshing and migration to preserve their information resources. The findings revealed inadequate funding, lack of necessary facilities, inadequate manpower, inadequate staff training and users and security, autonomy and administrative lags, power etc. Techniques have to do with some measures adopted by libraries to protect or

prevent the entire library materials or collections from being harmed, damaged or deteriorated. The following are some of the techniques used for preservation of information resources in libraries: cleaning and dusting of information resources, photocopying, re-binding, microfilming, lamination, fumigation, shelving to allow free air flow, air conditioning and digitization.

Olatokun (2008) carried out a survey of the various techniques used in the preservation and conservation of library materials in selected university libraries in Nigeria. Findings revealed that preservation and conservation techniques, though adopted in the university libraries, were not effectively in use although the libraries all had preservation policies. The study also revealed that cleaning and dusting of library materials was the most commonly used technique. The study established that there indeed incidences of deterioration, the most prominent being books becoming torn and cracking and scratching of digital materials. Further results showed that though some of the libraries adopted and used some digital preservation techniques, they still not effectively used. Other findings revealed that inadequate funding was the most severe inhibitor to effective preservation and conservation activities in the university libraries.

Shameenda (2011) investigated preservation and conservation of library materials, techniques and practices in the University of Zambia Library and its two branches. The study highlighted preservation and conservation issues which included managerial and financial considerations including storage and accommodation, staffing levels, policies, techniques and practices in preserving and conserving library materials and the information contained in them in order to ensure long term access to them. The research findings revealed that although the University of Zambia libraries were involved in the long-term preservation of library materials, they did not provide a well-planned preservation and conservation care because preservation was given

least priority and conservation programmes were addressed in varying degrees in the libraries. The study further identified lack of preservation and conservation planning, policies and weak commitment from the University of Zambia management on funding of libraries. Inadequate programmes and limited preservation and conservation education and training among librarians were the other forms of obstacles to effective preservation and conservation of library materials in the university libraries. The obstacles also include lack of awareness concerning preventive preservation measures, poor handling and use of library materials.

Nkamnebe, Udem and Nkamnebe (2014) assessed the use of library resources and services by students of Paul University, Awka in Anambra State, Nigeria. The study found out the levels of use of library and information resources. The findings revealed that students fairly used the library for their studies. Observations show that users make use of the library most during examination periods. It also revealed that resources currently available are fairly accessible to the students. Furthermore, the study revealed that the clientele were satisfied with the services and facilities given by the library. Problems militating against effective use of the University Library by the students were identified and solutions were proffered. It was recommended among others that the habit of using the Library should be inculcated into students through avenues such as organising library shows, library orientation, library exhibition, and inclusion of use of library as a course in the University's curriculum so as to attract students to the library.

The preservation policy lays down the criteria for the library to achieve optimum preservation standard. The policy should be flexible, subject to change to take account of future preservation demands and development. The policy must help to ensure that every user of the library have equal opportunity to see and enjoy unique and important information resources as

academic libraries are established to support this objective. This policy could be preservation policy statement, preservation processing policy for gifts and acquired materials, policy on fumigation, policy on food and drinks, policy on weeding, policy on digitization of documents and policy on the use of external devices on the computers. Akande (2010) asserted that there can be no serious commitment to preservation programme without a policy, which will guide effort at solving identified preservation problems.

### Methodology

Descriptive survey research method was adopted for this study. A total of sixty-six (66) professional and para-professional staff in the two university libraries were the target respondents in the study. Questionnaire was the instrument used to elicit responses from the respondents. Data gathered were tabulated and analysed using mean scores and standard deviation. Professional and para-professional staff of Ibrahim Badamasi Babangida Library in Federal University of Technology, Minna and Abubakar Gimba Library of Ibrahim Badamasi Babangida University, Lapai formed the population of the study.

### Results and Discussion

**Research Question One:** What are the causes of deterioration or damages done to information resources in university libraries in Niger State?

**Table 1: Causes of Deterioration or Damages Done to Information Resources**

S/N	Statements	$\bar{x}$	S.D
1.	Rough handling of materials by library staff	2.84	1.00
2.	Mutilation of materials by library users	2.99	0.99
3.	Environmental factors such as temperature and high humidity	2.94	0.94
4.	Biological factors such as insects, moulds, rodents, bacteria and fungi	2.87	0.92
5.	Chemical factors such as acidity of paper	2.75	0.94
6.	Natural disasters such as flood, earthquake and fire	2.74	0.95
7.	Improper organization and frequent use of materials	2.83	0.93

**Key:** Mean = ( $\bar{x}$ ) Standard deviation = (S.D)

Table 1 shows that all the seven statements listed were agreed to by the respondents. None was disagreed to. Table 1 also reveals that: rough handling of materials by staff with ( $\bar{x}$ =2.84; S.D=1.00), mutilation of materials by users with ( $\bar{x}$ =2.99; S.D=0.99), environmental factors such as temperature and high humidity with ( $\bar{x}$ =2.94; S.D=0.94), biological factors such as insects, moulds, rodents, bacterias and fungi with ( $\bar{x}$ =2.87; S.D=0.92), chemical factors such as acidity of paper with ( $\bar{x}$ =2.75; S.D=0.94), natural disasters such as flood, earthquake and fire with ( $\bar{x}$ =2.74; S.D=0.95) and improper organization and frequent use of materials with ( $\bar{x}$ =2.83; S.D=0.93). Consequently, all the mean scores were accepted as they are all greater than 2.50 criteria standard of assenting of mean.

**Research Question Two:** What are the techniques for the preservation of information resources in university libraries in Niger State?

**Table 2: Techniques for the Preservation of Information Resources**

S/N	Statements	$\bar{x}$	S.D
1.	Photocopying of printed documents	3.32	0.74
2.	Re – binding of books and periodicals	3.09	0.96
3.	Microfilming of periodicals	3.07	0.89
4.	Fumigation of the library building	2.84	0.99
5.	Lamination of charts and related documents	2.84	0.98
6.	Air Conditioning of all spaces	3.09	0.90
7.	Cleaning and dusting of the books and computers	3.32	0.92
8.	Digitization of old publications of staff, storage of e- materials such as CDs, DVDs in containers or cabinets and use of hard disc or flash disc to store e-books and e-journals	3.02	0.92
9.	Proper storage of audio-visual materials such as pictures, charts, slides, transparencies, guides, audio and video tapes in boxes, cabinets and vertical files	2.12	0.82

**Key:** Mean = ( $\bar{x}$ ) Standard deviation = (S.D)

Table 2 reveals that majority of the respondents agreed with eight out of nine statements listed. These include: photocopying of printed documents with ( $\bar{x}$ =3.32; S.D=0.74), re – binding of books and periodicals with ( $\bar{x}$ =3.09; S.D=0.96), microfilming of periodicals with ( $\bar{x}$ =3.07; S.D=0.89), fumigation of the library building with ( $\bar{x}$ =2.84; S.D=0.99), lamination of charts and related documents with ( $\bar{x}$ =2.84; S.D=0.98), air conditioning of all spaces with ( $\bar{x}$ =3.09; S.D=0.90), cleaning and dusting of the books, computers and televisions with ( $\bar{x}$ =3.32;

S.D=0.92), digitization of old publications of staff, storage of e- materials such as CD-ROMs, DVDs in containers, cabinets and use of hard disc or flash disc to store e-books and e-journals with ( $\bar{x}$ =3.02; S.D=0.92) respectively. Hence, all the mean scores were accepted as they are above 2.50 criteria set for assenting of mean. The table also showed that respondents disagreed with the remaining one statement about Proper storage of audio-visual materials such as pictures, charts, slides, transparencies, guides, audio and video tapes in boxes, cabinets and vertical files with ( $\bar{x}$ =2.12; S.D=0.82) which is below 2.50 decision criterion.

**Research Question Three:** What type of information resources used in university libraries in Niger State?

**Table 3: Type of Information Resources Used in University Libraries**

S/N	Statements	$\bar{x}$	S.D
1.	Information resources such as books are mostly borrowed at the circulation desk of the library	3.07	0.96
2.	Information resources such as books are mostly consulted in the library	2.72	0.97
3.	Information resources such as reference materials are mostly consulted in the library	2.74	0.99
4.	Information resources such as electronic resources are mostly used in the library	2.47	0.96
5.	Information resources such as newspapers, journals and magazines are mostly consulted in the library	2.43	1.07

**Key:** Mean = ( $\bar{x}$ ) Standard deviation = (S.D)

Table 3 is a reflection on the type of information resources used in university libraries in Niger State. Majority of the respondents indicated that books with ( $\bar{x}$ =3.07; S.D=0.96) were mostly borrowed at the circulation desk of the library at a high level. Books were mostly consulted in the library with ( $\bar{x}$ =2.72; S.D=0.97) and reference materials were mostly consulted in the library with ( $\bar{x}$ =2.74; S.D=0.99) respectively. Consequently, all the mean scores were accepted as they were above 2.50 criteria set for assenting of mean. On the other hand, respondents indicated that electronic resources with ( $\bar{x}$ =2.47; S.D=0.96) and newspapers,

journal and magazines with ( $\bar{x}$ =2.43; S.D=1.07) were consulted in the library at a low level as they are less than 2.50 criteria set standard.

## **Discussion**

The study reveals that rough handling of materials by library staff, mutilation of materials by library users, environmental factors such as temperature, light and high humidity, biological factors such as insects, moulds, rodents, bacterias and fungi, chemical factors such as acidity of paper, natural disasters such as flood, earthquake, hurricane, tornados and fire, improper organisation and frequent use of materials were the factors responsible for deterioration of information resources in university libraries in Niger State. This could be due to lack of plans for managing records or poor allocation of fund to libraries to acquire preservation equipment or chemicals to fight against the agents of deterioration. This finding is similar to that of Adekannbi and Wahab (2015) who investigated the preservation and conservation techniques of selected special and academic libraries in Nigeria. The study found out the causes of deterioration in both special and academic libraries were dust, wear and tear, excessive photocopying, pests and excessive light, frequent use of material, magnetism and biological agents. The results showed among others that both special and academic libraries adopted cleaning and dusting, shelving to allow free flow of air, security systems, de-acidification, technology preservation, refreshing and migration to preserve their information resources. The findings revealed inadequate funding, lack of necessary facilities, inadequate manpower, lack security etc.

The study reveals that majority of the respondents agreed that eight out of nine techniques of preservation of information resources listed were used for preservation of information resources in polytechnic libraries in Niger State. These technique included: Photocopying of

printed documents, re-binding of books and periodicals, microfilming of periodicals, fumigation of the library building, lamination of charts and related documents, air conditioning of all spaces, cleaning and dusting of the books and computers and digitization of old publications of staff, storage of electronic materials such as Compact Disc Read-Only Memory (CD-ROMs), Digital Video Disc (DVDs) in containers, steel cabinet and use of hard disc or flash disc to store electronic books and electronic journals. This finding is similar to that of Olatokun (2008) who carried out a survey of the various techniques used in the preservation and conservation of library materials in selected university libraries in Nigeria. Findings revealed that preservation and conservation techniques, though adopted in the university libraries, were not effectively in use although the libraries all had preservation policies. The study also revealed that cleaning and dusting of library materials was the most commonly used technique. The study established that there indeed incidences of deterioration, the most prominent being books becoming torn and cracking and scratching of digital materials. Further results showed that though some of the libraries used digital preservation techniques.

The study reveals that majority of the respondents agreed that books were mostly borrowed in the library, mostly consulted in the library, mostly consulted also were the references materials, electronic resources and serial publications such as journals, magazines and newspapers are partially consulted in university libraries in Niger State. This finding disagree with the findings of Nkamebe, Udem and Nkamebe (2014) as the co-authors assessed the use of library resources and services by students of Paul University, Awka in Anambra State, Nigeria. The study discovered the levels of use of library and information resources. The findings revealed that students fairly used the library for their studies. Observations showed that they used the library most during examination periods. It also revealed that resources currently available are

fairly accessible to the students. Furthermore, the study revealed that the clientele were satisfied with the services and facilities given by the library. Problems militating against effective use of the University Library by the students were identified and solutions were proffered. It was recommended among others that the habit of using the Library should be inculcated into students through avenues such as organising library show, library orientation, library exhibition, and inclusion of use of library as a course in the University's curriculum so as to attract students to the library.

### **Conclusion**

This study examined preservation and use of library materials. The terms preservation and use were defined. The concept of nature and forms of information resources, causes of deterioration of information resources, techniques adopted for preservation of information resources and levels of use of information resources were highlighted. The use of chemicals like hydrogen cyanide, carbon disulfide or methyl bromide to eradicate pests and insects in the library, installation of fire alarm system and fire extinguisher to curb fire outbreak, training and re-training of library personnel on preservation and among others. Once these are provided in the university libraries, the level of deterioration of materials will be reduced and use of information resources will be improved.

### **Recommendations**

Based on the findings of the study, the following recommendations were made to improve preservation and use of information resources in university libraries in Niger State:

1. Management of university libraries in Niger State should install air conditioned systems in the store rooms and library spaces and use of barometer and thermometer to test temperature and relative humidity level within the library. The use of chemicals like hydrogen cyanide,

carbon disulfide or methyl bromide should also be used to eradicate pests and insects in the library. Fire alarm system and fire extinguisher should be install to curb fire outbreak. Materials in single copy should also be reproduced into many copies to avoid over stressing of a material.

2. Management of university libraries in Niger State should also adopt techniques of preserving audiovisual resources through storing of pictures, charts, transparencies, guides, slides, audio and video tapes, in boxes, cabinets, standard shelves and vertical files.

3. Management of the universities in Niger State should acquire a variety of information resources which should not be limited to books, serials, reference sources but to include e-resources.

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