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Investigating the Preservation of Information Resources in Sa'adatu Rimi College of Education Kumbotso Library

Buhari Yakubu
Ibrahim Badamasi Babangida
University Lapai, Niger State,
Nigeria
buhariy@ibbu.edu.ng

Abstract

This study investigated the preservation of information resources in Sa'adatu Rimi College of Education Kumbotso Library. The study employed a descriptive survey research design. The population of the study comprised all professional and Para-professional staff currently working in the library. A paper-based questionnaire was used for data collection and the data were analysed using descriptive statistics, including percentages and frequencies. The study revealed that the deterioration of information resources in the library is caused by environmental factors, biological factors, mechanical factors, natural factors, and chemical factors. The study also revealed the preservation measures adopted to preserve the information resources were dusting of library materials, binding of deteriorated library materials, photocopying of library materials, regular mopping of the floor, fumigation, proper shelving of library materials, and use of air conditioners or ceiling fans. However, the study revealed that the preservation of information resources is facing various challenges such as inadequate funding, lack of trained personnel, inadequate security measures, lack of effective preservation policy, unfavourable weather conditions, inadequate training facilities, and lack of management support. Therefore, the study concluded that to improve the preservation of information resources in the library, adequate funding, intensive staff training, increased security measures, effective preservation policy, adequate preservation facilities, and stable weather conditions must be provided.

Keywords: *Preservation, Information resources, Academic libraries, College of Education, Nigeria.*

1.1 Introduction

Academic libraries are established support to academic institutions to achieve their objectives of teaching, learning, and research activities by providing effective information services to their respective communities of students, lecturers, and researchers. Academic libraries are responsible for selecting, acquiring, organizing, preserving, and making

information resources accessible for research and scholarship development. They are regarded as the heart of academic institutions, around which all academic activities revolve (Momodu, 2015; Abubakar, 2011; Sasikala, 2014). However, academic libraries today are almost void of information resources due to the sharp deterioration and poor preservation practice (Abdullahi et al., 2023; Ademilua et al., 2021; Mubofu et al., 2021; Mwilongo,

2020; Ogar 2020; Oluwaniyi, 2015; Orim, 2017).

Preservation is important to the sustainable utilization of academic library information resources (Kanyengo, 2009; Mubofu, et al., 2021). Preservation means protecting, maintaining, and restoring the usefulness of academic library information resources (Dada, 2021; Conway, 2010; Mwilingo et al., 2020). Preservation also involves the binding of materials, conversion of print materials to electronic resources, and, more recently, the transition from print media to online media (Kanyengo, 2009; Mubofu, et al., 2021). Preservation is done to prevent damage and ensure continued access to information resources (Mubofu, et al. 2020; Mwilingo et al., 2020). It is also done to allow scholars to comprehend the past, influence the present, and make plans for the future (Mubofu, et al. 2020; Mwilingo et al., 2020).

Preservation of information resources is more important and necessary in African academic libraries where there a limited financial resources and a need to balance the increasing demand of users (Oga, 2020; Kanyego, 2009). According to (Kanyengo, 2009), the substantial decrease in the rate of acquisition of information resources in African academic libraries due to declining budget allocation requires that the libraries preserve what they already have in their collection to save the cost of repairs or the necessity of purchasing information resources for a second time (Kanyengo, 2009; Ogar, 2022).

Preserving the information resources will also help them to provide effective information services in their libraries and sustain the quality of education in their countries (Kanyengo, 2009; Ogar, 2022). It is against the background of this information that this study aims to investigate the preservation of information resources in Sa'adatu Rimi College of Education Kumbos to Library.

1.2 Statement of the Problem

Deterioration of information resources has been one of the major problems facing academic libraries throughout the world (Ogar 2020). Although the deterioration of information resources is a global phenomenon, this problem is more pronounced in African academic libraries than elsewhere in the world due to the combination of factors not commonly found in developed countries (Ogar, 2020; Adetunla & Osunride, 2016; Bankole, 2010; Iyishu et al., 2013). These factors include environmental factors (such as pollution, dust, high humidity, excessive sunlight, etc.), biological factors (such as insects, rodents, fungi, bacteria, etc.), mechanical factors (such as theft, mutilation, underlining, tearing, etc.), natural factors (such as floods, fire, rain, earthquakes etc.), and Chemical factors (such as high acid) (Mubofu et al., 2021; Olubiyo & Olubiyo, 2023; Adetunla & Osunride, 2016; Bankole, 2010; Oluwaniyi 2015). The deterioration of information resources has greatly affected information service delivery and the quality of education (Mubofu et al., 2021; Ogar, 2020).

Therefore, to continue to provide effective information service in their libraries and sustain the quality of education in their countries, academic libraries in Africa must take all necessary measures to ensure that their information resources are preserved and maintained. Thus, this study aimed to investigate the preservation of information resources in Sa'adatu Rimi College of Education Kumbos to Library. Although several studies have been conducted on the preservation of information resources in various academic libraries in Nigeria (Ogar 2020; Ademilua et al., 2021; Orim, 2017), no study has so far investigated the preservation of information resources in Sa'adatu Rimi College of Education Kumbos to Library. This significant gap in the literature emphasizes the need of conducting this study in the library. The study will be useful in providing various

strategies for improving the current preservation practices in the library.

1.3 Objectives of the Study

The main objective of this study was to investigate the preservation of information resources in Sa'adatu Rimi College of Education Kumbotso Library. The specific objectives are:

1. To determine the causes of information resources deterioration in Sa'adatu Rimi College of Education Kumbotso Library
2. To determine the preservation measures adopted to preserve information resources in Sa'adatu Rimi College of Education Kumbotso Library.
3. To determine the challenges facing the preservation of information resources in Sa'adatu Rimi College of Education Kumbotso Library.
4. To suggest strategies for improving the preservation of information resources in Sa'adatu Rimi College of Education Kumbotso Library.

2.1 Literature Review

The deterioration of information resources has been established in the literature as a universal phenomenon. Deterioration of information resources could be caused by various factors such as environmental factors, biological factors, natural factors, mechanical factors, and chemical factors (Mubofu et al., 2021; Olubiyo & Olubiyo, 2023, Adamu et al., 2018; Iyishu et al., 2013; Bankole, 2010; Orim, 2017). The deterioration of information resources occurs due to environmental factors such as excessive temperature, uncontrolled humidity, deposition of dust particles, and pollution (Dada, 2022; Mubofu et al., 2022; Adamu et al., 2018; Iyishu et al., 2013; Orim, 2017). The deterioration of information resources can also occur due to natural factors such as floods, rainfall, fire outbreaks (Dada, 2022; Orim, 2017; Bankole,

2010). It can also occur due to biological elements such as rodents (mice and rats) and insects (silverfish, booklice, termites, cockroaches, bookworms) (Dada, 2022; Iyishu et al., 2013; Orim, 2017; Bankole, 2010; Adamu et al., 2018). Furthermore, information resources can experience deterioration due to mechanical factors and chemical factors such as poor handling or storage, theft, and vandalism (Orim, 2017; Bankole, 2010; Adamu et al., 2018).

Similarly, various preservation measures have been suggested by different preservation scholars and professionals on how to reduce the deterioration of information resources. For instance, Oluwanyi (2015) suggest that regular cleaning of the floor and the use of air conditioners are important ways to preserve information resources. According to Phillips (2015), climate control, disaster readiness, and coordinated pest controls are important measures for the preservation of information resources. Although this study was carried out in developed countries, the measures found may be applicable in other nations. (2015). Other preservation measures include dusting of library materials, binding of damaged materials, laminating of library materials, photocopying of library materials, regular mopping of floor, fumigating of the libraries, proper shelving of books, and installation of the air conditioner were also revealed as important measures employed to safeguard information resources from damage (Abdullahi, et al. 2023; Ademilua, et al., 2021; Shigwan, 2015; OluwanIyi, 2015; Olubiyo & Olubiyo, 2023; Dada, 2021; Matusiak & Johnston, 2014; Ifijeh et al., 2015). These preservation measures are important to stabilize, strengthen, and ensure that information resources are preserved and accessed by future users.

However, the preservation of information resources especially in resource-scarce environments like in Africa is faced with various challenges such as inadequate

funding, inadequate training facilities, lack of trained preservation staff, unfavourable weather conditions, lack of awareness, inadequate security measures, lack of a preservation policy, shortage of preservation equipment, and uncertainty about where to begin and how to preserve digital resources (Dada, 2022; Kanyengo, 2009; Mubofu et al., 2021; Oluwaniyi, 2015). Similarly, lack of cooperative effort among libraries on preservation-related issues, lack of management support, and negligent attitude toward preservation university management are some of the challenges affecting the preservation of information resources (Dada, 2022; Mubofu et al., 2021; Oluwaniyi, 2015). Other challenges include unfavorable government policies, poor quality of paper, dust particle deposition, dilapidation of the library structure, mutilation of print books, and theft (Dada, 2022; Oluwaniyi 2015).

In response to the challenges facing the preservation of information resources, different strategies have been suggested by various scholars on how to improve the preserve information resources. These strategies include providing adequate financial resources, intensive staff training, adequate security measures, effective preservation policy, adequate training facilities, strong management support, and controlling the weather conditions (Mubofu et al., 2021; Masenya & Ngulube, 2020; Masenya & Ngulube, 2019; Bankole, 2010; Kanyengo, 2009). The fund is important in the preservation process for the payment of preservation staff, and purchase of necessary preservation tools (Mubofu et al., 2021; Masenya & Ngulube, 2020). Similarly, staff training is important for competent work forces capable of preserving information resources (Mubofu et al., 2021; Kanyengo, 2009). This training can be provided in-house or through continuing education programmes

such as workshops and seminars (Bankole, 2010). Other important strategies suggested in literature include institutional management support, effective preservation policy, adequate security measures, adequate training facilities, and stable weather conditions (Mubofu et al., 2021; Kanyengo, 2009).

3.1 Methodology

The study employed a descriptive survey research design. The population comprised all sixty-eight (68) professional and Para-professional staff currently working in the library. The library staffs were chosen because they were the best to give the necessary information to answer the study's objectives. No sampling was done in this study because the population size was considered manageable enough. This decision was based on the Gay (1996) advice that there is little point in sampling a small population of less than a hundred, hence a survey of the entire population is recommended. A paper-based questionnaire was used in collecting the data for this study. The questionnaire was used because it was considered more economical and less time-consuming. The items in the questionnaire were adapted from earlier studies (Mubofu et al., 2021; Ogar, 2020; Dada, 2021) and modified to suit the purpose of this study. Likewise, the questionnaire was given to experts for face and content validity. After the validity, the questionnaire with a cover letter explaining the purpose and voluntary participation was distributed to the respondents by the researcher with the assistance of some library staff after obtaining permission from the college librarian. Sixty-four (64) questionnaires were received and made up a 98 percent response rate (64 usable questionnaires). The data was analysed using the SPSS 23 version. Descriptive statistics was conducted using frequency count (N) and percentage (%) for easy interpretation.

4.1 Results and Discussion of Findings

4.2. Respondents Demographic Information

As shown in Table 1, 64 respondents participated in the study comprised of 45 males and 19 females. The wide gender gap found in this study suggests a need for a more concerted effort by the Nigerian government to narrow the gender difference in job possibilities and student enrolment in higher institutions. The educational level of the respondents was also examined in this study because it was believed educational level has a connection with information resources

preservation practices. According to the findings, 34% of the respondents had a certificate, 23% had a diploma, 33% had a bachelor's, and 9% had a master's degree. The presence of employees with a certificate suggests that Nigerian academic libraries should invest more to ensure that information services are improved sustainably. Finally, respondents were requested to provide information on their working experience. The result showed that the majority of the respondents (64%) had more than 10 years of working experience while the rest (36%) had fewer than 10 years. The finding signifies that the respondents were in the best position to explain the preservation state since they had worked in the library for more than 10 years.

Table 1: Respondent Demographic Information

Variable	Categories	Frequency	Percentage
Gender	Male	45	70%
	Female	19	30%
Qualification	Certificate	22	34%
	Diploma	15	24%
	Bachelor	21	33%
	Masters	6	9%
Work Experience	Less than 10 years	23	36%
	More than 10 years	41	64%

4.3: Causes of deterioration of information resources in the library

The respondents were requested to indicate the causes of the deterioration of information resources in their library. As shown in Table 2, the major causes of the deterioration of information resources in the library were mechanical factors 64 (100%) and environmental factors 57 (89%). Other factors that deteriorate information resource were biological factors 55 (86%), natural factors 54 (84%), and chemical factors 42 (66%). This finding suggests that the deterioration of information resources in the library is caused by mechanical factors, environmental factors, biological factors,

natural factors, and chemical factors. These findings were consistent with earlier studies (Mubofu et al., 2021; Adamu et al., 2018) which found that environmental factors, biological factors, physical factors, mechanical factors, and chemical factors were the causes of the deterioration of information resources in various academic libraries. Therefore, the library management must ensure that proper preservation measures are taken to curb the deterioration of information resources and ensure a continued access to information resources.

Table 2: Causes of deterioration of information resources in the library

Causes of deterioration of information resources	Frequency	Percentage
Environmental factors	57	(89%)
Biological factors	55	(86%)
Mechanical factors	64	(100%)
Natural factors	54	(84%)
Chemical factors	42	(66%)

4.4: Preservation measures adopted to preserve information resources in the library

Respondents were requested to mention the preservation measures adopted to preserve information resources in their library. As shown in Table 3, the major preservation measures adopted include dusting the library materials 64 (100%), binding the deteriorated materials 64 (100%), and provision of air conditioners or ceiling fans 64 (100%). Other preservation measures include regular mopping of the floor 61 (95%), photocopying of the materials 60 (94%), proper shelving of the materials 57 (89%), and fumigating the library 49 (77%). This finding suggests that the

preservation measures adopted to preserve information resources in the library include dusting of the materials, binding of the deteriorated materials, provision of air conditioners or ceiling fans, regular mopping of the floor, photocopying of the materials, proper shelving of the materials, and fumigating the library were the preservation measures adopted to reduce the deterioration of information resources in the library. These findings were consistent with the findings of the study conducted by Dada (2022) which revealed that cleaning of books and shelves, and the deployment of security personnel were important preservation measures used in various libraries.

Table 3: Preservation measures adopted to preserve the library information resources

Preservation measures adopted to preserve information resources	Frequency	Percentage
Dusting of library materials	64	(100%)
Binding or laminating of deteriorated materials	64	(100%)
Photocopying of library materials	60	(94%)
Regular mopping or cleaning of the floor	61	(95%)
Fumigating the libraries	49	(77%)
Proper shelving of books to allow free flow of air	57	(89%)
Provision of air conditioners and ceiling fans	64	(100%)

4.5: Challenges facing the preservation of information resources in the library

The respondents were asked to mention the challenges facing the preservation of information resources in their library. As shown in Table 4, the major challenges facing the preservation of information resources in the library include inadequate funding 64 (100%), lack of trained personnel 64 (100%), and inadequate security measures 63 (98%). Other challenges facing the preservation of information resources

were unfavourable weather conditions 60 (94%), lack of effective preservation policy 62 (97%), lack of training facilities 55 (86%), and lack of management support 54 (84%). This finding suggests that the preservation of information resources is faced by various challenges such as inadequate funding; inadequate trained personnel, inadequate security measures, lack of effective preservation policy, unfavourable weather condition, lack of training facilities, and lack of management support. The findings were

consistent with findings of other studies (Kanyengo, 2009; Masenya & Ngulube, 2019; Mubofu et al., 2021; Oga, 2022) which revealed numerous issues affecting preservation of information resources, including insufficient funds, lack of effective preservation policies, inadequately trained personnel for preservation, shortage of

preservation equipment, harsh environmental condition, and lack of security measures were numerous issues facing preservation of information resources in the libraries. Therefore, various strategies must be taken by the library management to overcome the challenges and improve the preservation of information resources in the library.

Table 4: Challenges facing the preservation of information resources in the library

Challenges facing the preservation of information resources	Frequency	Percentage
Inadequate funding	64	(100%)
Inadequate trained personnel on preservation practice	64	(100%)
Inadequate security measures	63	(98%)
Lack of training facilities	55	(86%)
Lack of management support	54	(84%)
Lack of effective preservation policy	62	(97%)
Unfavourable weather condition	60	(94%)

4.6: Strategies for overcoming challenges facing the preservation of information resources

In response to the challenges facing the preservation of information resources, the respondents were asked to suggest strategies for improving the preservation of information resources in their library. The finding in Table 5 showed that providing adequate funding 64 (100%), intensive staff training 64 (100%), and adequate security measures 64 (100%) were the major strategies suggested for improving the preservation of information resources in the library. Other strategies suggested include providing effective preservation policy 63 (98%), enough training facilities 60 ((94%), stable weather conditions 59 (92%), and strong management

support 55 (86%). This finding suggests that to improve the preservation of information resources in the library, adequate funding, intensive staff training, adequate security measures, adequate training facilities, strong management support, effective preservation policy, and stable weather conditions should be provided. This finding collaborates with previous studies (Masenya & Ngulube 2019) which revealed that implementation of preservation policy, allocation of financial resources, good governance, and training of staff members, increased awareness are important strategies for the preservation of information resources. Therefore, these strategies must be implemented by the library management to ensure the effective preservation of information resources.

Table 5: Strategies for improving the preservation of information resources in the library

Strategies for improving the preservation of information resource	Frequency	Percentage
Providing adequate financial resources	64	(100%)
Providing intensive training of staff on preservation practice	64	(100%)
Providing adequate security measures	64	(100%)
Providing enough preservation training facilities	60	(94%)
Providing strong management support	55	(86%)
Providing an effective preservation policy	63	(98%)
Providing a stable weather condition	59	(92%)

Conclusions

This study investigated the preservation of information resources in Sa'adatu Rimi College of Education Kumbotso Library. The study revealed that the deterioration of information resources in the library is caused by environmental factors, biological factors, mechanical factors, natural factors, and chemical factors. The study also revealed that the preservation measures adopted to preserve information resources in the library were dusting of materials, binding of deteriorated materials, use of air conditioners or ceiling fans, regular mopping of the floor, photocopying of materials, proper shelving of materials, and fumigation. However, the study revealed that the preservation of information resources was hindered by inadequate funding, lack of trained personnel, unfavourable weather conditions, inadequate security measures, lack of effective preservation policy, lack of training facilities, and lack of management support. Therefore, the study concluded that to improve the current preservation of information resources in the library, adequate funding, intensive staff training, adequate security measures, adequate training facilities, strong management support, effective preservation policy, and stable weather conditions should be provided.

This finding has contributed significantly to the existing literature by providing reliable information on the preservation of information resources in Sa'adatu Rimi College of Education Kumbotso Library. The finding has also provided valuable information to library management that will enable them to make informed decisions associated with the preservation of information resources in their library. Also, library schools would benefit from this study by providing more courses related to the preservation of information resources. Although the findings are important to the literature, management, and library schools,

this study was limited in sample size. As such, replicating this study with multiple respondents in the participating library, including other college libraries would help in validating the findings of this study.

Recommendations

Based on the findings and conclusions of the study, recommendations were made to improve the preservation of information resources in the library:

- Adequate funding should be provided by the college management and government to help the library acquire all necessary facilities for preserving information resources.
- The library staff should be provided with more training on the preservation practices. This training may require the curriculum of library schools to be reviewed and redesigned to accommodate the training of library students with the necessary skills in the preservation of information resources. It may also include given those who are already employed sufficient internal training and the means to attend workshops and conferences on related topics.
- An effective preservation policy should be formulated and implemented by the library management in consultation with library personnel.
- The library staff and security agents should be more vigilant in monitoring library users and guard them against theft, mutilation, and other dirty acts in the library.
- The library management should show more interest in preserving their information resources and preventing deterioration.

References

- Abdullahi, S., Nwachukwu, V. N., & Ahmad, A. I. (2023). Disaster Preparedness Plan and Response Strategy as a Panacea for Effective Information Resources Preservation in University Libraries in North East, Nigeria. *Library Philosophy and Practice*, 1-22,
- Abubakar, B. M. (2011). Academic libraries in Nigeria in the 21st century. *Library Philosophy and Practice*, 1(135), 1-6.
- Adamu, M. S., Babalola, G. A., & Kasim, M. B. (2018). Effect of preservation on the use of information resources in colleges of education libraries, Niger State, Nigeria <http://repository.futminna.edu.ng:8080/jspui/handle/123456789/1507>
- Ademilua, S. O, Abiodun, A., & Arinola Ol. G. (2021). Emerging Issues in the Preservation and Conservation of Library Resources in the Development of the Nigerian Tertiary Institution Libraries in the 21st Century. *Continental J. Applied Sciences* 16(1):13 -23.
- Adetunla, G. B. O., & Osunride, A. A. (2016). Preservation and conservation of library materials in university libraries in South-West, Nigeria. *International Journal of Online and Distance Learning*, 1(1), 12-25.
- Awamleh, M. A., & Hamad, F. (2022). Digital preservation of information sources at academic libraries in Jordan: an employee's perspective. *Library Management*, 43(1/2), 172-191.
- Bankole, O. M. (2010). A review of biological deterioration of library materials and possible control strategies in the tropics. *Library Review*, 59(6), 414-429.
- Dada, G. A. (2022). Preservation of information resources in selected rural (public) libraries in southern Nigeria: State-of-the-art. *International Information & Library Review*, 54(3), 205-215.
- Gay, L. R. (1996). Educational Research: Competencies for Analysis and Application-9 th.
- Kanyengo, C. W. (2009). Preservation and conservation of information resources in the University of Zambia Library. *Journal of Archival Organization*, 7(3), 116-128.
- Ifijeh, G., Iwu-James, J., & Osinulu, I. (2015). From binding to digitization: issues in newspaper preservation in Nigerian academic libraries. *Serials Review*, 41(4), 242-249. <https://doi.org/10.1080/00987913.2015.1103153>
- Iyishu, A., William, O., Nkanu, W. & Ogar, F. (2013). Preservation and Conservation of Library materials in the digital age. *Journal of Information and Knowledge Management*, 4(2), 56-67.
- Masenya, T. M., & Ngulube, P. (2019). Digital preservation practices in academic libraries in South Africa in the wake of the digital revolution. *South African Journal of Information Management*, 21(1), 1-9.
- Matusiak, K., & Johnston, T. (2014). Digitization for preservation and access: Restoring the usefulness of the nitrate negative collections at the American Geographical Society Library. *The American Archivist*, 77(1), 241-269.

- Momodu, O. M. (2015). Academic library in Nigeria: Yesterday, today and tomorrow. *American Journal of Social Sciences*, 3(4), 115-119. <http://www.openscienceonline.com/journal/ajss>
- Mubofu, C., Mambo, H., & Samzugi, A. (2021). Information Resources Preservation: Bottlenecks and their Effect on Library Information Services. *Restaurator. International Journal for the Preservation of Library and Archival Material*, 42(1), 21-36.
- Mwilongo, K. J., Luambano, I., & Lwehabura, M. J. (2020). Collection development practices in academic libraries in Tanzania. *Journal of Librarianship and information science*, 52(4), 1152-1168. <https://doi.org/10.1177/0961000620907961>
- Ogar, F. O. (2020). Degradation and preservation practices of information resources in academic libraries in Cross River State, Nigeria. *Journal of Library Services and 25Technologies*, 2(2), 57-69.
- Olubiyo, P. O., & Olubiyo, L. M. (2023). Information Resources Preservation in Academic Libraries: Challenges and Strategies. *International Journal of Library and Information Science Studies*, 9(3), 24-34.
- Oluwaniyi, S. A. (2015). Preservation of information resources in selected school libraries in Ibadan North Local Government Area of Oyo State, Nigeria. *Library Philosophy and Practice*, 1.
- Orim, F. S. (2017). Funding and accommodation as indices of preservation of information resources of university libraries in digital age: The case study of south Nigeria. *International Journal of Applied Technologies in Library & Information Management*, 3(3), 121-129.
- Shigwan, R. (2015). Restoration and digitization of library archival materials. *Bulletin of the Deccan College Research Institute*, 75, 351-368. <https://www.jstor.org/stable/26264757>