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Human Factors Affecting the Preservation of Serial Materials: A Case Study of Federal University Libraries in North Central Nigeria

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Abstract

Rationale of Study – This study examined the human factors that affected the preservation of serial materials in federal university libraries in north-central Nigeria. The objective was to analyse human factors influencing the preservation of serial collections in federal university libraries.

Methodology – The study used a descriptive research design. The population was 250 librarians, while 196 was used as the sample. A self-created open-ended questionnaire collected responses from librarians and library officers at federal university libraries in north-central Nigeria.

Findings – The study revealed that human factors, such as theft and vandalism, natural disasters, and rough treatment of serial items, impact the preservation of these resources. The libraries use various preservation techniques, including dust removal, laminating, shelf care, repairing faded inks, binding, and photocopying. The statistically significant influence of human variables on preserving serial materials in federal university libraries in central Nigeria was also made clear. Librarians in these libraries had implemented some preservation strategies due to the deteriorating nature of serial material and the associated effects of human factors.

Implications – It was suggested, among other things, that university library management regularly teach library employees to incorporate more preservation techniques for serial items, like bleaching and pesticide use, microfilming, de-acidification, and digitisation.

Originality – This paper publishes the results of an original study on the human factors which affect the preservation of serials in federal libraries in Nigeria.

Keywords

Human factors, preservation, serial materials, disasters, libraries, Nigeria

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1 Introduction

The serial section in university libraries provides serial information services to library users. In Nigeria, serials are a significant source of information. The up-to-date information they contain is what makes them valuable. These essential sources of information teach, educate, and amuse readers while keeping them up to date with events in their community. They are essential and crucial sources of information since they consistently provide creamy or vital information (Abalaka et al., 2014).

According to Anglo-American Cataloguing Rules Second Edition (AACR2) (1998), a serial is a publication meant to be published continuously throughout time and typically has numerical or chronological designations. The definition highlights that serials are published continuously, indicating the need for organization, management, and security of the voluminous nature. Additionally, the definition uses the word "Successful," which is also known as "Consecutive," which means serial events that occur one after another and in numerical or chronological order. Additionally, serials provide updated information, which forces them to go on endlessly. The serial collections in the library must be kept in a condition appropriate to their use and intrinsic worth, according to the professional obligations of the librarians in charge of those items. This does not imply that all artifacts must be preserved permanently or even should be (Shameenda, 2011).

The term "preservation" has a broader meaning than "conservation," according to the 2010 International Federation of Library Associations Principles for Care and Healthy Handling of Library Materials. It covers every managerial and financial aspect of safeguarding library and archival materials and their information, including the supply of storage and accommodations, staffing levels, policies, strategies, and methodologies (IFLA, 2010). The Preservation Task Force's (2001) findings suggest that preservation includes conservation and upkeep. However, preservation and conservation are formulas that include strategies and procedures used to extend the life of library items and restore and protect them from damage, loss, decay, and deterioration. Since the 1800s, preservation has received documented attention at the Library of Congress. However, it was not until recently that policies were formally established when many strategies were used to channel copious amounts of freely available content into libraries (Kenneth & Schur, 2006).

Madu and Adeniran (2005) assert that the deterioration of serial materials is not recent. It all began with the creation of libraries and books. The majority of these library materials

will still be helpful in 100 years. Research collection and the universe of information and scholarship they support are in danger of being destroyed. According to Aina (2001), significant efforts had been made to preserve serial materials. However, storage was prioritized to increase the lifespan of library resources. Writing was more complex than it is today, and there were no means of producing several copies, so these efforts were necessary.

Human factors include careless handling, vandalism, and improper support during storage. Daw (2016) observed that librarians in charge of the documentary heritage are directly responsible for their collections' overall conservation and preservation. The author further buttressed that they are only sometimes aware of handling, storing, and using collections carefully to minimize damage and help preservation. Human factors can lead to indifference or lack of concern for the preservation of serial materials, which may be caused by their lack of preservation knowledge (Akande, 2009). The general population is the adversary of serials, so several strategies must be developed to prevent them from deteriorating, including proper information resource management, atmosphere control, environmental cleanliness, and routine fumigation of the library (Batubo, 2006; Reilly, 2008). Sawant (2014) noted that libraries lack specialized people to carry out preservation-related tasks, which may impede preservation. Since all-inclusive collections are impractical, university libraries must choose a focus for collection development. Librarians must identify the needs of the staff, students, other library users, and the university's programs (American Library Association, 2012). Human-caused serial material deterioration poses a severe threat to its preservation. Therefore, this study must emphasize the human variables influencing the preservation of serials in Federal University libraries in North-Central Nigeria.

2 Statement of the Problem

Serial items provide essential information to support teaching, learning, and research for students, faculty, and other outside users of the library. University libraries are expected to preserve and provide serial materials for users. Experience has shown that human factors such as careless handling, vandalism, and improper support during storage are significant challenges to preserving serial collections in university libraries in North Central, Nigeria. Hence only a little has been archived; this was discovered through observation by researchers and conversations with working librarians. In comparison, university libraries must provide up-to-date, high-quality, and diverse serial materials for students, postgraduates, faculty, and research fellows. Hence, the need to preserve serial materials to ensure the availability and provision of up-to-date serial publications for research by university libraries cannot be overstated. Therefore, the researchers are encouraged to conduct this study to identify ways university libraries can achieve their goals of learning, teaching, researching, and scholarly publishing to advance knowledge and development through the preservation of relevant and up-to-date serial collections.

The primary goal of this study is to analyse human factors influencing the preservation of serial materials in federal university libraries in North-Central Nigeria. The precise goals are to: determine the human influences on serial material preservation in university libraries, determine how to keep serial content preserved in university libraries and determine the relationship between human factors and the preservation of serial materials.

3 Literature Review

The overall preservation of the serial collection is directly under the control of the librarians who oversee the library's holdings. However, they are not necessarily knowledgeable about the proper handling, storage, and usage of collections to reduce harm and aid in preservation. Serials are frequently handled and cared for in subpar ways by their custodians and users. Inadequate storage, faculty repairers, rough handling, intentional abuse, folding the edge as a mark of reading, marking with a marker, mutilation, and vandalism are only a few instances of human behaviours that have a significant negative impact on serial materials (Dare & Ikegune, 2018).

The mismanagement of library and archival collections more explicitly falls under the purview of the librarian, archivist, and institutional policies and programs, by careless handling, shoddy methods, or blatantly persistent efforts to disregard the demands of collections for conservation. Mismanagement includes handling, processing, and storage processes that are detrimental to the wellness of serial materials. It also includes poor housekeeping practices. A rapid decline in the physical state of the collections due to wear and tear is caused by more individuals vying for fewer copies of serial items in libraries and information centres due to the population's exponential increase. Serial materials users underline sentences in serial materials and tear out pages, among other methods of handling serial materials. Thus, printed words are not given the respect and importance they deserve. In other words, users' actions described above result from high materials usage in a small building (limited resources).

Blue Ribbon Task Group on Sustainable Digital Preservation and Access (2010) asserts that economic factors, which are so important, are also a part of human activity. Creating a preservation program requires a sizable initial expenditure and continuing costs for the workforce, data administration, and storage. The fact that such programs benefit future generations primarily while requiring substantial present and continuous investment is one of their strategic concerns. The reasons for libraries' ambivalent views on serial preservation have varied widely. For librarians, the preservation of serial resources is a crucial topic. Since humans first learned to write, the issue of serial material preservation has persisted. The only source of the unknowable and unknown is from these. Every effort must be made to preserve these intellectual elements for future generations. Harvey (2007), on the other hand, noted that numerous authors have advocated for the idea that we have a responsibility to protect and conserve what is already in front of us. In a similar vein, Agresto (2009), in his response to the National Endowment for the Humanities, emphasized that "we have a human obligation not to forget. He continued by saying that it is essential for academics and teachers, who must rely on the availability of serial materials as the cornerstone of effective instruction. Then he said that telling the past is essential and valuable to us, the living.

Numerous techniques are used for serial material preservation. According to Ogunmodede and Ebijuwa (2013), preservation techniques are chosen based on the area, climate, and environment. A suitable treatment can achieve these conditions, such as repairing faded inks, bleaching, laminating, repairs and dust removal, racking, shelving, binding, and photocopying. In a different vein, Jantz and Giarlo (2005) noted that, from a preservation standpoint, digital technology might alter how university libraries capture, store, preserve, and access information. Traditional library issues, including conservation, preservation, storage, and space, are resolved through digitization. It gives various users greater access to information. According to Ngulube (2003), the ability of digital technologies to produce higher-quality copies of deteriorating originals, repeatedly reproducing digital images without compromising image quality, increased output and distribution flexibility, and potential cost savings from storage all present users with previously unheard-of opportunities for use.

The library's serial section is where the newspaper collections are kept. According to type and issue, they are sorted and packaged—year by year and month by month in some cases. Users had the option of ordering the entire paper or using clipped files. The library's reference department houses the clippings boxes, files, and the corresponding card index catalogue. Users look up specific files in the catalogue and request them. The reference desk personnel will get complete editions upon request from the conservation room.

4 Methodology

The study used a descriptive research design with 87 librarians and 163 library officers, comprising a target population of 250 respondents. The respondents were librarians and library officers of federal university libraries in North-Central Nigeria. The researchers used total enumeration sampling because the population is manageable. The research instrument for data gathering was a questionnaire titled "Human Factors Affecting the Preservation of Serial Materials Questionnaire (HFAPSMQ)." The questionnaire was personally distributed to the respondents by the researchers and the research assistant at each library with special permission from their Heads of Departments to ensure a high response rate. Descriptive statistics were used to analyse the data obtained from the administered questionnaire. The percentage was used to provide answers to the study questions. With the help of SPSS version 22, the analysis was completed.

4 Findings of the Study

Theft and vandalism (196, 100%), rough treatment (196, 100%), and disaster (127, 65%) are the human factors impacting the preservation of serial materials in Federal University Libraries in the North-Central Geopolitical Zone of Nigeria, according to data shown in Table 1. The preservation of serial works at Federal university libraries in Nigeria's north-central geopolitical zone is not affected by improper storage practices.

	Responses			
Human Factors	Agree		Disagree	
	Freq.	%	Freq.	%
Disaster (Fire, Flood)	127	65	69	35
Rough handling	196	100	0	0
Theft/vandalism	196	100	0	0
Improper storage	65	33	131	67

Table 1: Human Factors Affecting Preservation of Serial Materials in University Libraries

The methods used in Federal university libraries in North-central Nigeria for the preservation of serial materials include binding (192, 98%), dust removal (131, 67%),

laminating (131), and shelf maintenance (99, 51%). Other methods include photocopying (160, 82%), digitization (131, 67%), and restoring faded inks (99, 51%). While microfilming (148, 75%) and de-acidification (148, 77%) are not among the ways of preserving serial materials used by librarians in Federal university libraries in North-central Nigeria, bleaching and the use of pesticides (126, 64%) are. These findings are shown in Table 2.

Methods	Agree		Disagree	
	Freq.	⁰∕₀	Freq.	%
Biding	192	98	4	2
Dust removal	192	98	4	2
Laminating	192	98	4	2
Shelf maintenance	192	98	4	2
Photocopy	160	82	36	18
Digitalization	131	67	65	33
Restoring faded inks	99	51	97	49
Bleaching and use of insecticides	70	36	126	64
Microfilming	48	25	148	75
De-acidification	44	23	148	77

Table 2: Methods of Preserving Serial Materials

The association between human variables and the preservation of serial materials in Federal University Libraries in North-central Nigeria is shown in Table 3. The findings show a positive link between human variables and the preservation of serial materials at Federal University Libraries in North-central Nigeria, with a correlation coefficient of r of .582 while the alpha level of 0.05 is greater than the significant level of.000. The null hypothesis, according to which there is no meaningful connection between human variables and the preservation of serial materials, is thus disproved. In federal university libraries in North-central Nigeria, it was determined that human variables statistically and significantly affect the preservation of serial items.

		Human factors	Methods	
Human factors	Pearson Correlation	1	$.582^{**}$	
	Sig. (2-tailed)		.000	
	Ν	196	192	
Methods	Pearson Correlation	.582**	1	
	Sig. (2-tailed)	.000		
	Ν	192	192	

Table 3: Relationship between Human Factors and Preservation of Serial Materials

 $\alpha = 0.05$

5 Discussion of the Findings

The analysis of data on human factors that affect the preservation of serial materials in federal university libraries found that theft and vandalism, natural disasters, and rough handling of serial materials are the human factors that affect the preservation of serial materials in federal university libraries in Nigeria's north-central geopolitical zone. The overall preservation of the serial collection is directly under the control of the librarians in charge of the library's holdings. However, they are not always aware of the proper handling, storage, and usage of collections to reduce harm and aid in preservation. Serials are frequently handled and cared for in subpar ways by their custodians and users. The results are consistent with those of Dare and Ikegune (2018), which noted that improper storage, rough handling, intentional abuse, folding the edge as a mark of reading, marking by bullpen, mutilation, and vandalism are just a few human factors that negatively impact the preservation of serial materials.

Another finding of the study showed that digitalisation, dust removal, lamination, shelf care, repairing fading inks, binding, and photocopying are ways used by librarians in Federal university libraries in North-central Nigeria to preserve serial items. The study's findings concur with Ogunmodede and Ebijuwa (2013), who claimed that the location, climate, and environment influence the preservation practices used. These conditions can be achieved by applying the proper treatment, such as restoring faded inks, bleaching, laminating, repairs, and dust removal. The discovery supported that of Jantz and Giarlo (2005), who noted that, from a preservation standpoint, digital technology might alter how university libraries capture, store, preserve, and access information. Traditional

library issues, including conservation, preservation, storage, and space, are resolved through digitization. It gives various users greater access to information.

The findings revealed that human variables statistically and significantly affect the preservation of serial materials in federal university libraries in central Nigeria. The results align with those of Akande (2009), who discovered that human factors might cause action or a lukewarm attitude leading to negligence or a lack of concern for preserving serial materials. This may be because of the amount of preservation knowledge in the individual.

6 Conclusion

Based on the study's findings, it was concluded that federal university libraries in Northcentral Nigeria needed to adopt more preservation techniques, including digitisation, dust removal, lamination, shelf maintenance, restoring faded inks, binding, and photocopying, in order to preserve serial materials. Due to the prevalence of human elements in the library, including theft and vandalism, natural disasters, and the physical treatment of serial works, the librarians devised many preservation techniques. Human factors impact the preservation of serial items at federal university libraries in central Nigeria.

7 Recommendations

The following were advised in light of the data and conclusion presented above.

- 1. University library management should regularly train employees to adopt more preservation techniques for serial items, such as microfilming, de-acidification, and pesticide use.
- 2. The administration of the library and the institution should ensure that a sufficient campaign is launched to educate employees and students about the need for protection against all human elements that are to blame for the deterioration of serial items in the library.
- 3. In line with the current technological development, digitisation should be embraced because it is a better way to preserve valued serial collections for future use.

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