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Measures Adopted by Library Personnel for Preservation of Library's Information Resources in Academic Libraries in Delta State

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Abstract

The study investigated the measures adopted by library personnel for preservation of library and information resources in academic libraries in Delta State. Descriptive survey design was adopted for the study. The population of this study comprised of all three hundred library personnel working in all the academic libraries in Delta state, Nigeria. The proportionate stratified random sampling technique was used to select 250 library personnel from eleven academics libraries in the State. Descriptive statistics was used to analyze data gathered. The major findings of the study is that serial materials are preserved through the binding of journals, newspapers, etc periodically, keeping serials materials in neat shelves, keeping newsletters in special rackets, etc while electronic resources were preserved by, storing electronic resources in tapes, DVDs, in correct cases and fire resistance places, regularly cleaning desktops,, keeping library magnetic tapes/media away from potential sources of magnetic fields, calling of technical experts to manage electronic information resources from time to time, etc. However, the libraries do not use remote storage for backup nor carry out risk assessment of electronic information resources acquired by their library. Thus, it was concluded that academic libraries in Delta state need to do more in the preservation of information resources.

Keywords: Academic Libraries, Conservation, Library and Information Resources, Preservation

1.1 Introduction

The usefulness of library and information resources is overwhelming that one can categorically state that there is no library without information resources. Information resources are to be preserved and well taken care of for the common good of the library, its users and host community. Library users and library personnel may need to handle library and information resources carefully so that future users may also enjoy it. Damaged, lost, stolen or missing books and other information resources significantly hinder the library's ability to provide the resources that student and staff need. Replacing some of these information resources is expensive and sometimes even impossible to buy since most of them must have gone out of print. The seriousness of the problem will probably not be apparent until there is an unpleasant discovery that a wanted

library resource is no longer available in the collection. Therefore, to avoid this scenario and even worst ones, information resources in the library must be preserved.

Preservation of library activities has been defined by Akporhunor (2010) as the totality of steps necessary to ensure the permanent accessibility of any particular material forever. It can be seen as the maintenance of library and information materials so that they can be closed to the original condition as much as possible. Preservation refers to all necessary strategies, measures and steps taken to prolong the lives of library and information resources. It can be said also that preservation includes all the managerial and financial considerations, including storage and accommodation provision, staffing, policies, techniques and methods involved in preserving library and archive materials and the information (Aina, 2003 & Akporhunor, 2010). With preservation, information are transferred to other medium, such as microfilm and electronic materials.

Notably, academic libraries acquire and house a number of information resources that users can locate, handle and use immediately. These information resources continue to play important roles in education programme in sustaining the diverse forms of cultural expression. Libraries acquire, process, organize and preserve information resources which depict the way of life and experience from others. Information resources also facilitate the planning and implementation of learning programs that will equip students with the skills necessary to succeed in a constantly changing social and economic environment. They provide and promote quality fiction to develop and sustain in students the habits and enjoyment of reading for pleasure and to enrich students' intellectual, aesthetic, cultural and emotional growth. Information resources also cater for differences in learning and teaching style

through the provision of and equality of access to a wide range of materials, fiction and non-fiction, print, audio, video and digital. They provided educators with access to relevant curriculum information and professional development materials within and outside (Ogbebor, 2011).

One of the complex issues facing libraries today is how best to preserve the materials that comprise their collections. Since all information resources are not of equal value, decision must be made concerning what information resources to preserve. One potent information resource to be preserved is book. Books, according to Aina (2004) are the best known of all information carriers. Books in the library must be taken care of or else they would deteriorate rapidly. Library personnel and users can take care of books when handling them by having clean hands and a clean area to use the books, keeping food and drinks away, removing the book from the shelf by gripping on both sides of the spine at the middle of the book instead of tugging at the top of the spine and not forcing a book to lie open to 180 degrees, instead prop up the covers of an open book to decrease the opening angle.

Other information resources to be preserved are serials, manuscript, cartographic materials like maps, graphics materials, sound recordings, reference materials, internet resources and all materials in different fields of studies like social sciences, arts, sciences. The level and extent to which each of these library resources are preserved, is dependent on the preservation programme available and the library personnel.

This notwithstanding, preservation methods are adopted based on location, weather and environment. This no doubt posed some difficulties in the effective preservation of information resources in academic libraries. In course of preservation of library and information resources in this

age a good number of difficulties emerge which may include absence of organizational plans for managing records. There is also fear of low awareness of the role of record management in support of organizational plans for managing records, absence of policies, absence of budgets for record management, and accountability. Furthermore, Olatokun (2008) also found some difficulties in the preservation of information resources. One striking problem he found was lack of competent manpower. For any preservation programme to succeed in libraries and archives there must be adequate and well trained manpower. This is because preservation of information resources is a specialized field of knowledge that requires library and information professional who understand the physical and chemical nature of the materials in their library and archive holdings. It is the duty of library personnel to preserve the intellectual content of documents for the generation to come irrespective of media and technology changes.

Unfortunately, several studies have shown that preservation techniques are recognized in Nigerian academic libraries but the techniques and extent of preservation of library and information resources are not fully practiced due to notably inadequate funding, and lack of preservation knowledge. It is against these backgrounds that the researcher seeks to investigate the measures adopted for the preservation of library's information resources in academic libraries in Delta state.

1.2 Statement of the problem

A survey of literature on preservation of Library and information resources / materials in Nigeria as stated by different scholars such as Olatokun (2010) revealed that the prominent inhibitors to effective and efficient preservation of information materials in Nigerian libraries, archives and record centres include inadequate finance, inadequacy of &

equipment materials, lack of trained personnel, tropical climate, and poor maintenance culture. Based on this, library materials which are unique in nature may be lost or damaged. As observed by the researcher, there is a dearth of valuable publication because most of these library materials are not properly protected in these libraries. Despite what these libraries struggled and suffered to acquire these library resources which are not easy to be replaced when they are lost or not properly preserved, library materials continue to deteriorate. The information contained in these library resources can serve library users for decades of years. Besides, these resources are the major sources of reference and consultation to all who are in need of one information or the other yet, these resources lack proper preservation in these libraries.

It may be observed that in these university libraries, these library resources maybe very dirty and dusty. Some of these library and information resources may have lost their back cover and as a result of this, they may just be floating in the shelves as they can no longer be identified with their area of specialization. The spine of some of these resources may have been pulled out as a result of rough handling of these resources. It also speculated that some of these resources may not have any hard-cover, they may not be laminated and there may not be provision for duplicate copies for these resources. May be, the pages of these resources may be incomplete as a result of constant and frequent use by the users and as a result of this, some of the information contained in them may have been also lost. It might be that these information resources are not preserved at all? The question might be that if they are, to what extent are they well preserved them? It is based on this premise that this study investigates the measures adopted for the preservation of library and information resources in academic libraries in Delta state

1.3 Objective of the Study

The main purpose of the study is to determine the measures adopted for the preservation of library and information resources in academic libraries in Delta state. However, the specific objectives of the study are to determine the measures adopted for:

- 1. The preservation of serials in academic libraries in Delta state.
- 2. The preservation of electronic information resources in academic libraries.
- 3. To investigate the challenges (if any) library personnel encounter in the preservation of library's information resources.

2.1 Review of Related Literature

2.2 Conservation theory

A recent and more modern library theory is that which was propounded by George Brock Nannestad in August 2000. Nannestad suggests that all objects or artifacts which surround us contain information of various kinds thus should be conserved. Obviously, these artifacts were not all made just to provide information but many - perhaps most were made to have a function or useful purposes. Nannestad went further to stipulate that one type of preservation is that of preserving information resources from and about the artifacts. This is precisely what happens when we microfilm documents and discard the originals. The intended content is preserved and information about the provenance is added to it. Hence, academic libraries should employ all necessary forms of preservation of information resources in order to preserve the information therein for the satisfaction.

This theory discussed has relevance to the study being undertaken. Apart from being similar in many respects, it hinges on the role academic libraries have to play in preserving library and information resources for the benefit of library users.

2.3 Measures adopted for the preservation of serials in academic libraries

Serials are periodicals which may be published daily, weekly, monthly, quarterly, and yearly. They complement the usual textbooks and reference materials in academic libraries to add to the variety of reading materials. (Omosor, 2015). Serials that should be preserved in academic libraries include journals, newspapers, magazine, bulletins, proceedings, newsletter etc. It was in the light of these, that Ugah (2009) wrote that being a valuable source of information and reference tool, there is need to preserve and protect serials from theft, fire, mutilation and other destruction that may lead to loss of information.

Sadly, in Nigeria scholars like Alabi (2015) have found that preservation of newspapers are not effective because of certain factors. Alabi (2015) stated that academic libraries encounter several problems in managing newspapers. Librarians are confronted with the problems of handling the papers because of their fragility; preserving them because of their information contents, and housing them because of lack of space and the rapid rate at which they are churned out. Hence, Ifijeh, Iwu-James and Osinulu (2015) recommended that academic libraries in Nigeria should adopt the digitization model for newspaper preservation.

Magazines are another type of serials that should be preserved in academic libraries. They contain written articles, photographs and advertisements. They are usually popular fashion etc. They are good for reading and entertainment. Magazines also provide information on topical issues. Complimenting this Abalaka, Yahaya and Okikiri (2014) states that magazines entertain readers and keep them abreast or informed about what happens in the society around them. Hence, academic libraries must preserve and protect magazines

for both present and future use. Are magazine preserved effectively in academic libraries? In a study carried out by Ifijeh, Iwu-James and Osinulu (2017), it was found that there were no written acquisition policy on how to acquire magazines, neither were there any written policy on preservation plan against disasters.

It was also discovered that adequate funds were not made available for the procurement of magazines, however, some measures were in place for averting or reacting to disaster, but were so limited that they could not have comprehensively covered all the forms of disasters to which the library was disposed. Abalaka, Yahaya and Okikiri (2014) also discovered in their study that library staff were half way trained on the issue of preservation and so are not fully equipped or skilled to keep to recent trends of techniques for curbing disasters in the library Microfilming is one of the under study. preservative methods that is well known for its durability and efficiency. However, this preservative method is not available in academic library as proven by Abalaka, Yahaya and Okikiri (2014) but if ventured into, it will add to the preservation age, conserve space and reduce the deterioration process of newspapers and magazine so that there will be no need for replacement, as money meant for replacement can be channelled towards enriching existing collections. Generally, according to library of congress preservation recommendations, an ideal environment for serials is 55°F in storage area and not more than 750 reading areas, (below 70°F is better) with relative humidity levels at 50 percent. Very low humidity can cause paper to deteriorate, while high temperature encourages the growth of molds and mildew. Serials publications should be cleaned regularly at short intervals to prevent destruction by insects, moulds and things of the like. Even a cool store and warm reading

room is not the whole answer, as change in temperature and humidity can damage serial materials.

Unfortunately, academic libraries face a crossroads when contemplating serials preservation issues. Binding, off-site storage, preserving e-journals, and vendor efforts, as well as looking at new developments, such as Google Book Search, offer strategies and challenges for preserving serials and expanding avenues of access for users. Many options exist for serials preservation, but libraries must ultimately consider their individual needs and environment to determine the best serials preservation strategy.

2.4 Methods adopted for Preservation of electronic information resources in academic libraries

Modern academic libraries as stated by Ikegune (2016) maintain collections that include not only printed materials such as, books, periodicals, newspapers, and magazines, but also electronic resources such as art reproductions, films, sound and video recordings, maps, photographs, microfiches, microfilms, CD-ROMs, computer software, online databases, and other media. In addition to maintaining collections within library buildings, modern academic libraries often feature telecommunications links that provide users with access to information at remote sites.

Oluwanyi (2015) defined electronic resources as computer based information resources in the school libraries .e.g. Microcomputer with a Compact Disk-Read Only Memory (CD-ROM), computer with internet connectivity. Preserving electronic resources is an important and specialised aspect of preservation. In view of this, Day (2010) stated that the concept of preservation, when used with regard to electronic or digital information, can be difficult to define

adequately. Some people prefer to use the word 'archiving', which is used in a computing science context to mean the creation of a secure backup copy for a fixed period of time.

Nevertheless, in preserving electronic or non-book resources, the use of airconditioners, fans and windows in ensuring good air circulation is highly recommended. This is because electronic resources are particularly sensitive to the effect of ultra violet, light and heat. It therefore means that many of them, if not all, should never be shelved near a window or expose to heat of light levels within the library, should also be controlled using appropriate techniques including the use of blinds and curtains to reduce ultra-violet rays of sun and the use of fluorescent UV-filters. Digitization is one of the ways in which electronic and non-book materials are being preserved for posterity in library and archives. According to Ikegune (2016), many cultural institutions and libraries have undertaken projects to exploit the potential of digital technology for displaying and researching unique and fragile materials. Many institutions prioritize electronic collections for digitization because of their value. Fumigation is also acknowledged as one of the best management techniques for preservation of electronic or non- book materials or fragile documents in the library and archives.

Unfortunately, in Nigeria, preservation of electronic resources has yet to take its actual place in most academic libraries. Validating this, Oluwanyi (2015) noted that preservation of both print and electronic resources, as a collection management strategy has been relegated if not totally neglected by librarians and documentalists for a very long time in Africa, especially in Nigeria The reason for this is a lack of funding and the implementation of preservation policy (Ikegune, 2016).

For instance, in a survey carried out by

Ikegune (2016), found that library software, database computer hard drive compact discs are commonly available in the three universities libraries surveyed, with library software having the highest. It was also found that the commonly used technique in management and preservation of these electronic resources in their libraries are cleaning and dusting, shelving of electronic resources or non-books for free flow of air, adequate security. Cleaning and dusting were the most frequent techniques used in the preservation and management of electronic resources or materials. It was also discovered in Ikegune (2016) that the rate of deterioration of their electronic collection in the University of Ibadan and Obafemi Awolowo University library is low while the rate of deterioration in Ladoke Akintayo University is high. Also, Njeze (2012) in her study on deterioration of library materials in University libraries in South-West Nigeria found that there was high rate of deterioration in the studied universities, some of which are caused by wear and tear, dust particles.

3.1 Research Methods

The descriptive survey design was used in conducting the study. This was to ensure that important and relevant facts were collected from the sampled population whose analysis aided the generalization of inferences on the larger population. The population of this study comprised of all 300 library personnel working in all the academic libraries in Delta state, Nigeria. The sample of this study consisted of 83% of library personnel which is 250 library personnel drawn from eleven (11) academic libraries in Delta state, Nigeria. The sample was chosen using proportionate sampling technique. The questionnaire was the main instrument in this study. It was divided into 5 sections. A four (4) rating scale questionnaire, where the four response options for each statement given will

be used. These options are as follows: Strongly Agreed, Agreed, Disagreed and Strongly Disagreed; Highly preserved, Somewhat preserved, Not much preserved and Not preserved; Very large Extent, large Extent, Small Extent an very small Extent of the research instrument. Thus, Forty (40) library personnel from John Harris Library, University of Benin libraries were given the main instrument (questionnaire) for trial testing.

The responses from the respondents were used to calculate the reliability coefficient of the instrument. The co-efficient correlations were obtained using Cronbach alpha method of assessing internal

consistency with the aid of SPSS version 20. The reliability index of the instrument is as follows: Overall is 0.860: Cluster A – 0.790: Cluster B – 0.608; Cluster C – 0.715; Cluster D – 0.894 and Cluster E- 0.816 A reliability test was conducted to check the internal consistency. Field work was done extensively and all data collected were analyzed using descriptive statistic with the aid of SPSS version 21 and presented in tables.

4.1 Results/Discussions

Objective One: To determine the measures adopted for the preservation of serials in academic libraries in Delta State.

Table 1. Mean Responses of Library Personnel on Measures Adopted for the Preservation of Serials in Academic Libraries N=237

S/N	Items	Mean	SD	Remark
1	Newspapers are microfilmed	2.20	.67	Disagree
2	Newspapers are bound every week	3.04	.69	Agree
3	Serial materials are kept on neat shelves	3.27	.57	Agree
4	Digitalize serial materials	2.40	.75	Disagree
5	Newsletters are kept in special rackets	2.97	.67	Agree
6	Annual reviews and proceeding are stored in iron shelves	2.90	.56	Agree
7	Library users are not allowed to take serial materials like	3.31	.63	Agree
	newspapers			
8	Serial materials are dusted periodically	3.15	.61	Agree
9	Serial materials are reformatted every week	2.37	.78	Disagree

Table 2 shows the mean responses on measures adopted to preserve serials in academic libraries in Delta State. Of the 9 measures listed, the respondents agreed that their libraries adopt 6 measures as shown by the mean responses which ranged between 2.90 and 3.31. The measures are; binding newspapers every week, keeping serials materials in neat shelves, keeping newsletters in special rackets, storing annual reviews and proceedings in iron shelves, not allowing users to take serials like newspapers away from the library and periodically dusting the

serial materials in the library. However, 3 of the listed measures were not adopted by libraries as shown by their mean responses of 2.20, 2.40 and 2.37.

Responses on storing annual reviews and proceedings in iron shelves seem to be the commonest adopted strategies as shown by the standard deviation score of .57 which suggests that respondents were more consistent in their responses compared to the item 9 which has a standard deviation score of 78. This result is similar to the findings of Abalaka, Yahaya, and Okikiri (2017) who

found that these vital serial materials preservation strategies were not applied by most of the libraries they studied which made them advocate for the binding of newspapers/Magazines as well as the microfilming of all serial materials in a country like Nigeria. On the other hand, the findings of this study contradicted those of Dare and Ikegune (2018) which revealed that microfilming, fumigation exercise, disaster preparedness, digitization of Serials

Publication, Reformatting, de-acidification and Preservation of serials in original format were the methods adopted to preserve serials in the selected academic libraries they surveyed.

Objective Two: Find out the measures adopted for the preservation of electronic information resources in academic libraries in Delta State?

Table 2. Mean Responses of Library Personnel on Measures Adopted for the Preservation of Electronic Information Resources in Academic Libraries N=237

S/N	Items	Mean	SD	Remarks
1	Uses remote storage for backup of electronic information			
	resources	2.32	.77	Disagree
2	Stores tapes, DVD, CD, optic disk etc in correct cases and fire resistance places	2.62	.81	Agree
3	Do more of migration based preservation (from hardcopy to digital)	2.42	.73	Disagree
4	desktop computers, laptop are cleaned regularly	3.03	.59	Agree
5	carries out risk assessment on electronic information resources acquired in the library	2.49	.67	Disagree
6	Magnetic tapes/media are kept away from potential sources of magnetic fields, including electrical equipment	2.50	.64	Agree
7	Technical experts manage electronic information resources from time to time in	2.81	.70	Agree
8	Computer drives are maintained and cleaned on a regular basis	2.74	.61	Agree
9	All storage media are checked regularly for signs of damage	2.73	.66	Agree
10	A digital repository to preserved electronic information resources	2.71	.68	Agree

Table 3 shows the mean responses of library personnel on the measures they adopt to preserve electronic information resources in their libraries. As shown by mean responses for 7 out of the 10 which ranged from 2.50 to 3.03, the respondents agreed that they adopt these 7 measures. The adopted measures include; storing electronic resources in tapes, DVD, CD, optic disks in correct cases and fire resistance places, regularly cleaning desktops and laptops, keeping library

magnetic tapes/media away from potential sources of magnetic fields including electrical equipment, Technical experts managing electronic information resources from time to time, maintaining and cleaning computer drives regularly, checking all storage media regularly for signs of damage and using digital repository to preserve electronic information resources.

However, the libraries do not use remote storage for backup (Mean = 2.32) and do not carry out risk assessment of electronic

information resources acquired by their library (Mean = 2.49). They equally disagreed that they do more migration based preservation (Mean = 2.42). The results are similar to the findings of Astle, and Mui (2012) in terms of backwardness in the use of digital backup measure. They found that majority of the surveyed university libraries

do not duplicate or have facility to duplicate photographic materials like motion picture as back-up for storage.

Objective Three: To determine the challenges (if any) library personnel encounter in the preservation of library and information resources

Table 3. Mean Responses of Library Personnel on the Challenges they Encounter in the Preservation of Library and Information Resources in Academic Libraries N=237

S/N		Mean	SD	Remark
1.	Lack of equipment like fans, shelves, air-conditioners	2.81	.82	Agree
	for the preservation of library and information resources			
2.	Lack of preservation policy	2.87	.70	Agree
3.	Harsh climate weather in Delta state	2.81	.70	Agree
4.	Lack of awareness of preservation strategies	2.75	.72	Agree
5.	Inadequate funding	3.09	.67	Agree
6.	Lack of motivation to preserve resources	2.84	.71	Agree
7.	Shortage of trained staff for preservation of resources	2.88	.71	Agree
8.	Administrative bureaucracy	2.80	.86	Agree
9.	Epileptic power supply	3.00	.83	Agree

As shown in table 5, library personnel agreed that all the listed 9 possible challenges for preservation of library and information resources are encountered in their libraries. These challenges include; lack of equipment for preserving library and information resources (Mean = 2.81), lack of preservation policy (Mean = 2.87), harsh climate whether in Delta State (Mean=2.81), lack of awareness of preservation strategies (Mean = 2.75), inadequate funding (mean =3.09), lack of motivation to preserve resources (Mean = 2.84), shortage of trained staff for preservation of resources (Mean = 2.88), administrative bureaucracy (Mean = 2.80) and epileptic power supply (Mean = 3.00).

The standard deviation scores shows that the respondents are more consistent in their responses regarding inadequate funding as challenge to the preservation of library resources. However, they were most diverse in their responses as it relates to administrative bureaucracy as a challenge to library resource preservation. Some of these results were consistent with the findings by Ifijeh (2014) that poor technological infrastructure, inadequate funding, data security breaches were some of the challenges library staff encounter in the preservation of library's information science. This present study also found that staff lacked motivation for the preservation of information resources. This finding supports the opinion held by Ekwueme, Iya, Gumel and Ohayagha (2005), that most librarians have negative attitude towards preservation of library materials. It is equally in line with the position held by Akussah (2013) that despite the fact that librarians are the greatest energy of the print library, they neglect these materials.

Conclusion

This study has been able to establish that academic libraries preserve their serial and electronic resource to a moderate extent and use measure that need to be improved such as binding newspapers every week, keeping serials materials in neat shelves, keep newsletters in special rackets, store annual reviews and proceedings in iron shelves etc all in a bid to preserve serial materials. The study also reveals that some measures are adopted in the preservation of electronic resources although more needs to be done in the preservation of electronic resources in these libraries. However, in the light of the challenges found, certain recommendations are made.

Recommendations

The following recommendations have been made based on the findings and conclusions made in this study.

- The parent institutions should ensure that adequate fund is allocated to libraries as this is the bedrock to ensure good house-keeping of library materials. This fund will be used to buy preservative agents, train library staff, preservators and preservation managers to ensure good preservation practice in the institutional libraries.
- Academic libraries should enhance users' orientation programmes for both staff and students, through creating awareness, handbills, library handbooks and inclusion of library studies. This will help users develop positive attitude in handling library material.
- There is need for ECOWAS and NGO'S involvement in the training of preservations and librarians, in institutional libraries through voluntary donation and support. This is because, the

- major challenge of institutional libraries is inadequate funding which affects the training of librarians, preservators, and preservation managers.
- Good governance and best technical support should be adopted for the strengthening of preservation of valuable books in libraries. In the era of electronic information storage devices, the digitization of library books may solve the problems of preservation of libraries to a greater extent.

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