

# **BOOK PRESERVATION TECHNIQUES AND LIBRARY STAFF AWARENESS IN ACADEMIC LIBRARIES IN RIVERS STATE, NIGERIA**

**Okpokwasili, N. P.**

**\*Uwuma Sokari**

*The University Library, Rivers State University of Science and Technology*

*Port Harcourt, Rivers State, Nigeria*

*\*E-mail: uwuma4u2004@yahoo.co.uk*

## **ABSTRACT**

*The awareness of library staff in academic libraries in Rivers State about the principles underlying book preservation techniques has been investigated. The survey covered four hundred library staff from three universities, one polytechnic, and one College of Education in Rivers State were investigated. Precisely, the study covers five academic libraries namely; Rivers State University of Science and Technology, Port Harcourt, University of Port Harcourt, Rivers State University of Education, Port Harcourt, Rivers State Polytechnics, Bori and Federal College of Education (Technical), Omoku, Rivers State. Library Staff in these Institutions were randomly selected for the study. A questionnaire consisting of thirteen questions was used to obtain data for the study. A grand mean of 2.38 reflects a low level awareness of library staff about the principles. A t-value of 2.14 against critical value of 1.65 at 0.05 level of significances and 398 degrees of freedom reflected a significant difference in the level of awareness between the professional and non-professional library staff under study. Training and retraining of library staff are among recommendations were made.*

*Keywords: Staff awarness, book preservation technique, academic library*

## **INTRODUCTION**

The library is the bed-rock of any academic system. It enhances man-power development, research, teaching and the training of the next generation of academics. The primary functions of universities the world-over is the advancement of knowledge, teaching and research the cardinal points of its mandate. As explicitly as the goals of universities are, the actualization of these goals could be a mirage without the complimentary role of the library. Against this background, the Federal Government of Nigeria in its National Policy on Education (1983) clearly identifies the library as one of the most important educational services and urges every state government to provide funds for the establishment of libraries in all educational institutions. It is not surprising therefore that; the Federal Government does not bend its policy, inspite of the increase in the country's technological development. That the Federal Government of Nigeria deserves commendation for taking the giant step of acknowledging the importance of the library in its National Policy on Education does not need emphasis.

However, the Nigerian Government is not left alone in appreciating and recognizing the relevance of the library. The point is that, the relevance of the

university library attracts global recognition. The fact that, no recognized university as well as other tertiary institutions of higher learning across the globe is without a library facility adds credence. In developed nations; ways and means to enhance the university system is pursued vigorously through well-developed and adequately funded libraries. In developing countries, despite the economic meltdown, polices armed at improving the university system do not play down the importance of the library. University regulatory bodies do not play politics with university library standard in accrediting and evaluating university programs.

In Nigeria, the activities of the National Universities Commission (NUC) give credence to this fact. The National Universities Commission which was set up in 1962 following the recommendation of the Ashby Commission has the primary objectives to ensure the orderly development of university education in Nigeria and to maintain high standard. The NUC in keeping with existing internationally recognized standard and practice does not grant accreditation to any university without library facilities. However, one thing is to established libraries and develops their collections; another is to protect library collections from wear and tear.

The latter is referred to as preservation of library materials. Lasisi (1999) observes that, preservation is used to denote all those activities and measures intended at conserving library materials for posterity. Muhammad (2006) defines preservation of library materials as all necessary strategies, measures and steps invested into prolonging the lives of library information resources. In view of these, preservation of books in academic libraries could be summarized as proper care of books. It is a means of safeguarding library books and preventing decay, thereby prolonging the books shelf-life. There are a number of reasons for persevering library book materials. These includes;

- Prolong the shelf-life of the books.
- Enhance library services.
- Save Fund for the library and its funding institution.
- Maintain continuity and advancement of knowledge

Besides, library collection development is capital-intensive and no library, no matter its financial strength can afford the luxuries of book deterioration.

Books preservation in academic libraries can be done using chemicals or physical method. The chemical method involves periodically fumigating the library with fungicides, bactericides to check microbiological attack on library books, thereby preventing book deterioration. While physical technique includes proper handling of books and maintaining good sanitation in and around the library environment. Library book deterioration can be caused by a number of factors, which includes:

- Physical agents-high temperature, humidity and sunshine.
- Biological agents-dust, acids and other atmospheric contaminants.
- Human agents – thefts, mutilations and defacement.

Rose (1993) noted that, environmental factors and natural disasters are the major players affecting the life spans of the materials because of poor quality. A

recent publication by the Library of Congress (1998) also observed that, the environment around the book is a major concern because unacceptable levels of temperature and humidity will accelerate deterioration. It further observed that dust, dirt and grime from handling can adversely affect books. Dambel (1999) points out that, air pollution, especially in the modern industrialized cities which have high level of air pollution, and which is a major threat to paper in library collection, and natural disasters as the result of floods, fires and earthquakes that occur naturally in certain areas. Batubo (2006) observes that, people in general and users in particularly...constitute another enemy to library and information materials. To protect library books from decay a number of techniques have been devised including

- Proper handling of book materials.
- Atmospheric control of the library environment.
- Environmental cleanness of the library.
- Periodical fumigation of the library.

Academic libraries are libraries established in higher institutions of learning. They take care of the information needs of the academic community. Books are one of the major library materials used for rendering library and information delivery services. As these materials are utilized preservation becomes imperative, to prolong the shelf-life of library book materials. Given the fact that books are too expensive in the developing countries including Nigeria, there is the need for the library staff to be aware of the basic principles employed in book preservation and how to improve upon their knowledge of book preservation. The big question now is how well versed with principles underlying book preservation methods are the library staff in academics libraries in Rivers State? The specific objectives of the study were to:

- Determine the book preservation techniques predominant in academic libraries in Rivers State.
- Examine the level of awareness of library staff on principles underlying book preservation techniques they adopt.
- Determine the awareness of library staff on causes of book decay.
- Assess the effect of professional training of library staff on awareness of principles of book preservation.

The following questions guided the study:

- What book preservation technique is predominant in the academic library under survey?
- What is the level of awareness of the library staff in academic libraries in Rivers State of the principles underlying the book preservation techniques they adopt?
- How are the library staffs aware of what causes library book decay?
- What effect has level of education of library staff on the awareness of principles underlying book preservation?

The following hypotheses stated in the null form were tested

***Ho<sub>1</sub>***: There is no significant difference in the level of awareness of basic principles underlying book preservation between the Professional and the Non-

Professional library staff in academic libraries in Rivers State

**Ho<sub>2</sub>:** There is no significant difference in the level of awareness of basic principles underlying book preservation between University Library Staff and Library staff in College of Education and Polytechnic in Rivers State.

### METHODOLOGY

Survey research design was used for this study. Five academic libraries in Rivers State were chosen for the study. Three of the academic libraries were university libraries, one was a Polytechnic library and the other a College of Education library. The five academic libraries were chosen because of their rich collections which were predominantly book materials. A total of 400 library staff was randomly sampled from about 3000 staff that work in the academic libraries in Rivers State. Questionnaire was the instrument use for data collection. The questionnaire which consisted of 13 questions constructed in the likert type rating scale, sought to obtain data to give answers to the four questions raised for the study. The two hypotheses were tested using t-test statistical tool.

Two lecturers in library and Information Science Department of Imo State University Owerri validated the questionnaire. The reliability of the questionnaire was determined using the test retest method to give a reliability coefficient of 0.71. The questionnaire were administered personally to the respondents by the researcher. The completed questionnaires were collected on the spot from those who responded to theirs immediately, while others were collected on an agreed date between the respondents and the researcher. On the whole four hundred copies of the questionnaire were administered and collected. From the data obtained one hundred and twenty six of the academic libraries were professional staff while two hundred and seventy four of them were non-professional library staff. The result was analyzed using the mean, standard deviation and t-test.

### RESULTS AND DISCUSSION

**Table 1:** Awareness of staff on the principles underlying book preservation methods

Item	X	S	Degree
Rodents are responsible for book decay.	1.87	1.05	NA
Insects are harmful to library book materials.	1.92	0.96	NA
Shelving a book spine down rather than up can prevent the text from pulling out of the binding due to its weight.	2.87	1.12	A
High humidity in an attic or basement can promote mold growth, cockle pages, and attract insects to the library.	2.06	1.01	NA
Insect such as termites, cockroaches, bookworms, silver fish, bristletails, fish moths, firebrats, booklice enter into the library as a result of poor sanitation of library premises	3.11	1.24	A
Radiation and visible light accelerates book deterioration.	2.10	1.00	NA
Dust, dirt and grime from handling can adversely affect books.	3.00	1.71	A
Many books are damaged by the habit of pulling the books off the shelf with the head cap or the top of the spine.	2.99	1.14	A
Cleanliness and removal of dust and dirt reduces the production of both micro and macro-biological agents in the library.	2.62	1.10	A
Maintenance of constant temperature and relative humidity and fumigating with fungicides, bactericides periodically check microbiological attack on library books.	2.53	1.73	A

Rodents like mice, rats, and squirrels can be combated through proper cleanliness of collection areas of the library stock	2.01	1.16	NA
Particulates can be controlled through the use of vacuum cleaners.	1.9	81.20	NA
Micro-organisms grow rapidly under temperature, humidity, and light nutrients and especially in badly ventilated and damp areas.	1.90	1.01	NA
Grand mean.	2.38	1.25	NA

Source: Field work 2010

Table 1 above reveals that there is little or no awareness of respondents of the principles underlying book preservation methods. There was high level of awareness in items 3, 5, 7, 8, 9, and 10 because the mean was greater than the cut off point of 2.4 that could be accepted as awareness level. The respondent had a high level of awareness for items that involve care of books, because care of book materials is part of the users education programmes of the institutions. From the grand mean of 2.38 (SD = 125). Which is lower than 2.43. it is held that the staff have not much awareness of the basic principles of book preservation techniques.

**Table 2:** Awareness at Professional level

Item	Professional			Non-professional		
	X	SD	Dec	X	SD	Dec
Rodents are responsible for book decay	2.42	1.03	A	1.62	1.11	NA
Insects are harmful to library book materials.	2.06	1.02	NA	1.86	0.94	NA
Shelving a book spine down rather than up can prevent the text from pulling out of the binding due to its weight.	2.95	1.37	A	2.8	31.54	A
High humidity in an attic or basement can promote mold growth, cockle pages, and attract insects to the library.	2.64	1.21	A	1.79	0.90	NA
Insect such as termites, cockroaches, bookworms, silver fish, bristletails, fish moths, firebrats, booklice enter into the library as a result of poor sanitation of library premises	3.36	1.20	A	2.99	1.30	A
Radiation and visible light accelerates book deterioration	2.40	1.15	A	1.96	1.05	NA
Dust, dirt and grime from handling can adversely affect books	3.10	1.85	A	2.9	51.69	A
Many books are damaged by the habit of pulling the books off the shelf with the head capture the top of the spine.	3.07	1.21	A	2.95	1.10	A
Cleanliness and removal of dust and dirt reduces the production of both micro and macro -biological agents in the library.	2.68	1.31	A	2.59	0.95	A
Maintenance of constant temperature and relative humidity and fumigating with fungicides, bactericides periodically check microbiological attack on library books.	2.92	1.46	A	2.35	1.87	NA
Rodents like mice, rats, and squirrels can be combated through proper cleanliness of collection areas of the library stock.	2.20	1.75	NA	1.92	1.43	NA
Particulates can be controlled through the use of vacuum cleaners.	1.61	1.01	NA	2.15	1.57	NA
Micro-organisms grow rapidly under temperature, humidity, and light nutrients and especially in badly ventilated and damp areas.	2.15	1.23	NA	1.78	0.97	NA
Grand Mean.	2.58	1.34	A	2.29	1.21	NA

Source: Field work 2010

From table 2, it could be deduced that professional library staff (Librarians) in the Institutions under study were highly aware of items 1, 3, 4, 5, 6, 7, 8, 9 and 10. While the non-professionals ones were highly aware of items 3, 5, 7, 8, and 9 as being the principles behind library book preservation techniques. The opinions of the respondents differed on items 1, 4, 6, and 10. While both groups jointly showed high level of awareness for items 3, 5, 7, 8, and 9, both equally exhibited low level of awareness for items 2, 11, 12, and 13. The grand mean for the professional library staff shows a high level of awareness with a grand mean of 2.58. While the non-professional library staff had a grand mean of 2.29, which reflects a low level of awareness of the principles behind book preservation techniques in the library.

**Table 3:** Analysis of differences in levels of awareness due to professional level using t-test

Respondents	N	X	SD	t	Decision
Professional library staff	126	2.58	1.34	2.14	Significant
Non-Professional library staff	274	2.29	1.21		

Source: Field work 2010  $P < 0.05$  test = 1.65 df = 398

Table 3 above shows that there was a significant difference in the level of awareness of the basic principles underlining library book preservation techniques between Professional and Non-Professional library staff in the Institutions under study in Rivers state, this indicates that the null hypothesis that there is no significant difference in the level of awareness of principles of book preservation techniques between the Professional and Non-Professional library staff in academic libraries in Rivers state is rejected. The calculated value of 2.14 is greater than the critical value of 1.65 at 398 degrees of freedom and 0.05 level, significance.

**Table 4:** Analysis of the differences between principles of book preservation techniques by Location using t-test

Respondents	N	X	SD	t	Decision
University Library Staff	200	2.45	1.13	1.27	N.S
Colleges of Education and Poly Library Staff.	200	2.31	1.07		

Source: Field work 2010

From table 4 above, there was no significant difference in the level of awareness of the principle of book preservation techniques between University Library staff, and College of Education and Polytechnic Library Staff. This is because the calculated t-test of 1.27 is less than the table value of 1.65 at 0.05 levels of significance and 398 degree of freedom. The null hypothesis that, there is no significant difference in the level of awareness of basic book preservation techniques between University Library staff, and College of Education and Polytechnic Library Staff in Rivers state is therefore accepted.

From the analysis of data for this study, findings revealed that library staff in academic libraries in Rivers state are not too aware of the basic principles of book preservation techniques based on the grand mean of 2.38 (SD. 1.25). The respondent show low level of the causes of library book decay as expressed in items 1,2,4,6. Findings also revealed that professional library staff in academic libraries in Rivers state are more aware of the principles of library book preservation techniques than their non-professional counterparts. Professional training therefore plays a major role exposing library staff to book preservation technique and the principles that underline them. Both professional and non-professional library staff however had low level of awareness on items 2, 11, 12 and 13.

## CONCLUSION AND RECOMMENDATIONS

This study has shown that Non-professional library staff in academic libraries in Rivers State are not too aware that book deterioration is caused by micro organisms and this can be increased by poor sanitation of library premises. Thus periodically fumigating the library with fungicides, bactericides and maintaining good sanitation

could check microbiological attack on library books. A difference in the level of awareness between professional and non-professional library staff responses call for the training and retraining of Librarians and Library Assistant as recommended in the National Policy on education (2004), this would enable the non-professional library staff acquire basic skills in book preservation. Based on the findings of this study the following recommendations were made:

- That academic institutions, especially universities, Polytechnics and Colleges of Education, should adhere to the Federal Government directive as contained in the National policy on Education to train and retrain library staff. This will enable them acquire basic skill in book preservation and in turn safeguard library book materials from decay as the knowledge acquired are been put in to use.
- Professional librarians on their part should organized seminars and in-house training sessions for the non-professional library staff on basic principles of book preservation techniques. This would help reduce the rate of library book decay as the non-professional library staff join hand in the fight against library book deterioration.

## REFERENCES

- Batubo, F. B.** (2006). *Preservation and security of library and information Materials*, Paper presented at the Rivers State House of Assembly, one week electronic library training workshop for the library staff held at the New Assembly Complex E-Library, Port Harcourt, 11<sup>th</sup> -15<sup>th</sup> September.
- Dambel, N.** (1999) - *The role of library in preservation of information materials in College of Education*. Journal of Technical Teacher Education. 2 (2), 14-19.
- Lasisi, J.** (1999). *Handling and care of library materials*. a paper presented at the workshop on reposition the National library for effective performance in the next millennium. Organized by the Department of Administration, National Library of Nigeria, 20<sup>th</sup> – 24<sup>th</sup> September, 1999, pp. 2-4
- The Library of Congress (1998) - *Preservation: Care, Handling and Storage of Books* <http://cc.bingj.com/cache.aspx?q=book+preservation&d=5032915797737852&mkt=en-US&setlang=en-US&w=2550b44d,51830b80> ( Retrieved 5<sup>th</sup> June, 2010).
- Muhammad, U. N.** (2006) - *Preservation and conservation of library materials: the situation in the National library of Nigeria*. **Nigeribibliuos**. 17 (1&2). 116-139
- National University Commission (1994) - *National University Commission: Annual report*, Abuja-Nigeria: National University Commission.
- Federal Republic of Nigeria (1983) - National Policy on Education*. Lagos: Federal Ministry of Education.
- Ojebode, F. I.** (2006). *Care of library materials*. In: *Gbememosi, B. O. and Asiru, S. M. (Ed) (2006). Fundamentals of Library Education in Tertiary Institutions*,
- Rose, H.** (1999) - *Preservation of book in tropical and subtropical countries*, London: Booker Publishers.