This study determined the level of awareness of preservation practices of library print materials and its implementation according to UNESCO Conservation Guidelines by library managers in the south east geo-political zone of Nigeria. The primary data were collected with the aid of a questionnaire and face to face observation, a test-retest method of reliability of two weeks interval was conducted, with a reliability coefficient of 0.84 obtained. The study found that few of the library managers 20(43.5%) are aware of the preservation practices in the UNESCO conservation guidelines, 24(52.2%) of the library managers adopt preservation practices. It was suggested that government should conduct workshops, seminars and conferences for library managers with adequate funding and enabling environment to enable library managers work effectively and use the UNESCO Conservation Guidelines in their preservation practices. There should be a visitation of institutions that are implementing the guidelines for knowledge and skill acquisitions.

Keyword: Awareness, Implementation, Print materials, preservation practices, UNESCO conservation guidelines.

continuity of the past, with the present and the future. Besides, no institutions exist without library and that is why the thought of stocking library with adequate information resources comes in mind when an institution is to be established. More so, the quality of library resources both print and electronic determines quality of graduates produced and research development. The purpose of setting up libraries is to acquire, process, store, preserve and make available current and relevant print and electronic information materials that will meet the need of its user at appropriate time both now and in future. Therefore, Libraries play vital role in development of individuals in our society and libraries are agents of educational, social and economic development.

This information said to be collected, processed and stored for purpose of reading, are definitely been stored in materials which are degradable and therefore needs to be conserved for posterity sake. Print materials are vital and delicate, the way they are handled can affect life span of the records they contain, for records to be kept for future use, they need to be preserved and conserved. The use of machines which mechanically ground wood into pulp, also greatly reduce wood fibers. This caused paper to be vulnerable to deterioration and decay, because the chemicals induced deterioration and shortened its capacity to bond together. This results to weak paper, which posed preservation problem.

Library materials could be print and non-print. Print materials could be books (textbooks), reference sources, serials, theses and dissertations and legal publications. Non-print materials are all information resources in machine readable format such as CD-ROMS, diskettes, flash drives, films, microfiche and allied accessories such as computer software and hardware (Iman, Adeyoyin, Jegede, Adesanya, 2008).

Over the years, University libraries in Nigeria have continued to experience deterioration of the status of their library materials owing to adverse weather conditions. The danger of destruction threatens not only research collections but also the world of knowledge they support. According to Kademani (2003), factors affecting the health of information materials are wars, fire, floods, earthquakes and communal or ethnic conflicts that have damaged the holdings of many University libraries, destroying forever much of the recorded history of human civilization. Library Materials also fall victims to slow decay caused by acid content in paper, insect’s infestation, improper storage or handling, excessive heat, high or low humidity and air pollution.

University libraries in Nigeria are generally believed to practice conservation of library materials which aims to ensure the longevity and safety of information resources. However, in spite of library managers in conservation practices, there are still observable cases of damage in most of the University libraries as exposed by the researches of Njeze (2012) with the implication that vital resources are lost and meeting the information needs of the users often impaired.

Library managers according to Parvez and Mohd (2009) mean personnel’s managing both human and material resources in the library. They are the decision making body in the library. Library Managers comprises Unit heads ranging from senior librarians, deputy university librarians, the university librarians and chief library officers. They are in charge of the operations and services of the university libraries. Though they are library staff but they are at the managerial level otherwise known as library management staff.

The researcher has observed that the library managers seems to be carrying out their conservation practices in non-uniform ways that could not be said to be patterned in a particular way or based on the UNESCO Conservation Guidelines. This has not helped to improve the conservation of the library materials in their library as the practices by these library personnel seem confusing. The researcher is therefore motivated by this observation to study level of awareness and implementation of UNESCO Conservation Guidelines among the library managers in the South-Eastern Nigerian universities.

**REVIEW OF LITERATURE**

In order to assist in meeting the needs of member states, especially developing countries in the specialized areas of Conservation, UNESCO with IFLA and ICA (2000) developed guidelines for the conservation of library materials. The purpose of this Guideline is to provide archivists and Librarians, especially those concerned with planning, commissioning and managing conservation services, with a summary of guidelines which they can apply in selecting and introducing those which are most appropriate to their own situations. The UNESCO Conservation Guidelines are the blue print for sound conservation of library materials.

IFLA Principles for the Care and Handling of Library materials (2010) defined Conservation as “specific practices adopted to slow down deterioration and prolong the lifespan of an object by directly intervening in its physical or chemical make-up. It is the act of prolonging the life expectancy of damaged or undamaged elements of cultural Property such as paper. Edhebe (2004) stated that conservation is a field of knowledge concerned with the coordination and planning for practical application of the techniques of binding, restoration, paper chemistry and other materials technology as well as other knowledge pertinent to the preservation of resources. Conservation is a term, which embraces three closely related ideas, “preservation, protection and maintenance.”

Preservation according to Altenhöner (2013) can be defined as the strategic task of curating physical objects in a way which ensures access to objects for a longer time. More traditionally, preservation can be defined as
the physical preservation of single objects or whole materials. This means in practice the stabilization of physical material or the slowdown of natural decay processes of distinctive objects. Taking a broader perspective, curation also includes tasks such as the prevention of negative influences like temperature fluctuations, damage from water and so on.

According to Victoria et al., (2013) no library material is infinite. By their very nature, they are susceptible to deterioration, hence preserving and conserving them become ultra-important. In order to retain the information contained in all media of communication for effective use by future generations, there is the need to preserve, conserve or affect both activities on them. According to United Kingdom institute for Conservation (Ukic, 2008), preservation embraces all actions to prevent materials of cultural properties from damaging them by creating optimal conditions of storing, exhibiting, using and transportation.

Preservation also includes surveying the proper storage and handling techniques, security, including theft, vandalism, disaster prevention, education, training and outreach programs for staff, patrons, clients, and the public. Conservation on the other hand, refers to specific practices taken to slow deterioration and prolong the life of an object by directly intervening in its physical or chemical make-up. Examples of the latter are the repair of damaged books, binding or the de-acidification of paper. Conservation therefore, is the treatment of library materials to stabilize their physical structure in order to sustain their survival as long as possible in their original format. Alegbeleye (2002).

Library materials can be preserved successfully by slowing the process of deterioration and by preventing incidental and catastrophic damage (Reed-Scott, 2000 & Harvard College, 2001). Alegbeleye (2002) argues that “although the process of preservation is frequently seen to be retarding or reversing the effects of time, in fact much of the preservation involves forecasting how something will age and taking steps to mitigate the aging”

American Institute for Conservation of Historic and Artistic Works, (2011) declared that Poor handling procedures can cause significant damage to books, resulting in restricted, delayed, or discontinued use, or requiring expensive treatments before the volume can be used again. The consequence of this poor handling and heavy use was that most libraries were left with a lot of damaged books and journals which were in need of conservation.

Library managers should be made to realize that library materials need to be handled carefully and skillfully, not used or abused until they were worn out and then discarded and replaced, since replacement might not be possible. According to Northeastern Document Conservation Center(2012), Staff training for safe handling practices is important for ensuring that materials will be preserved during processing and also when being used by the public. Users should be instructed in the careful handling of library materials in an initial orientation, as well as when formats change and require different handling practices.

### Library Materials preservation measures

**Good Housekeeping (Cleaning):** Anasi (2010) stated that the practice of good housekeeping is probably the most simple and inexpensive method of preventive conservation for any type of material in the library. Common sense and good housekeeping can add years to the library materials. Books should be removed from shelves periodically. At this time, inspect the books for dust or evidence of pests. If books are dusty, dust with a dry, clean brush in a ventilated area or outdoors. Shelves should be dusted with a magnetic wiping cloth so the dust is absorbed and not simply rearranged on the shelves. Vacuuming is the best way to clean library materials because it is least likely to introduce dust back into the environment.

**Shelving:** North east Document Conservation Center Preservation Leaflets Disaster Assistance (2012) opines that storage and handling methods should have a direct impact on the useful life of Library materials and the accessibility of information. Damage to library materials can be avoided by preventing overcrowded, careless, or haphazard storage conditions. Chemically unstable and improperly fitting shelving and storage enclosures accelerate the deterioration of materials they are intended to protect. Normal use causes wear, but inexpert and rough handling can quickly lead to extensive damage to library materials requiring expensive repair or replacement.

**Handling of Library Materials:** Mohammed (2006) stated that poor handling or rough handling of library materials however quickly leads to serious irreparable harm. Therefore, it is the job of the university library managers to advocate best practice when handling and using collection items, within the Library and externally. The libraries managers should provide training for their staff and all users as enshrined in UNESCO Conservation Guidelines.

**Flattening:** Alper (1993) stated that it is important to remember that moist paper is weak and very vulnerable to damage, so they should be handled with the utmost care by drying and flattening under precisely controlled Conditions. According to Kander (1999) Paper documents that have been folded or rolled for many years have a tendency to resist opening. Sometimes a document may even be so stiff and brittle that it will crack or break when opened. In this case, it may be necessary to humidify the document in order to unfold or unroll it safely.
**Pest Control:** According to Pinniger (2012), many collections of old books, manuscripts and archives will show signs of damage by insect pests. Holes in books and bindings, large chewed areas and scraped surfaces are all evidence of pest attack. Much of this damage is probably historic and no longer active, but it is important to understand pests and so prevent further damage to collections.

**Provision of Functional Air Conditioners:** Air conditioning equipment that is able to effectively cool and dehumidify the air must be chosen. If compromises have to be made, temperature must be kept to a maximum of 25°C with the humidity not above 60% RH. If the level of both parameters cannot always be simultaneously achieved, it seems more important to keep humidity within the given limits than temperature.

**Provision of adequate Security to Prevent theft, Mutilation and Vandalism:** According to (Ajegbomogun, 2004), the issue of library materials security is of growing concern to university libraries and library managers. This is because library materials constitute the bedrock for services provided to the university community and serve as important assets to the library. Also, helping our patrons learn, explore, discover and grow is what library system is all about. Library managers have been battling with the problem of insecurity of library materials, which resulted from man-made malpractices such as theft, mutilation, vandalism, fire which renders services in effective, inefficient and insecure. Lost of library materials is a problem that affects library worldwide. Therefore, securing and protecting the materials can help libraries provide information needs of the university community.

**OBJECTIVES OF THE STUDY**

The general objective of this paper is to study the level of awareness and implementation of UNESCO Conservation Guidelines among the library managers in the South-Eastern Nigerian universities. The specific objectives of this study are:

1. To find out the level of awareness of the Library Managers on the preservation practices in the UNESCO Conservation Guidelines.
2. To find out the extent of implementation of the preservation practices in the UNESCO Conservation Guidelines by Library Managers.
3. To find out if there is a significant difference in the extent adoption of the preservation practices in the UNESCO conservation guidelines base on institution.

**METHODOLOGY**

Survey approach was adopted for this Study. Primary data were collected with the aid of a Questionnaire administered to Library managers of South-east Universities. The Population of the Library managers is 81 which was obtained from the various Universities. The “face to face” method of data collection was used and responses from 46 library managers which gave a response rate of 57% which was therefore used for the study.

To guarantee the reliability of the instrument, it was administered on thirty (30) participants out of the envisaged population of the study. A test-retest reliability method of two weeks interval was conducted, response obtained were subjected to Cronbach’s alpha coefficient reliability test and a reliability co-efficient of 0.84 was obtained.

The data obtained was analyzed using summated scores and t-test
RESULTS

**Figure 1:** Shows the number of respondents based on their institution, 26 (57%) of the library managers indicated that they are from Federal university, while 20 (43%) of the library managers indicated that they are from the state university. Therefore majority of the library managers are from federal university.

**Figure 2** shows that 19 (41%) of the respondents indicated that they are of the rank of Librarian 1, 24 (54%) of the respondents indicated that they are of the rank of senior librarian, 2 (4%) of the respondents indicated that they are of the rank of a Deputy University Librarian while 1 (2%) of the respondents indicated that they are of the rank of a University Librarian. Therefore majority of the respondents are of the rank of a senior librarian.
What are the library managers’ scores on the extent they are aware of the preservation practices in the UNESCO conservation guidelines?

Table 1: Range of scores of library managers on the extent they are aware of the preservation practices in UNESCO conservation guidelines

<table>
<thead>
<tr>
<th>Range of scores</th>
<th>N</th>
<th>%</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 – 19</td>
<td>0</td>
<td>0</td>
<td>Very low extent</td>
</tr>
<tr>
<td>20 – 32</td>
<td>2</td>
<td>4.3</td>
<td>Low extent</td>
</tr>
<tr>
<td>33 – 45</td>
<td>4</td>
<td>8.7</td>
<td>Moderate Extent</td>
</tr>
<tr>
<td>46 – 58</td>
<td>20</td>
<td>43.5</td>
<td>High extent</td>
</tr>
<tr>
<td>59 – 65</td>
<td>20</td>
<td>43.5</td>
<td>Very high extent</td>
</tr>
</tbody>
</table>

Table 1 shows that 20(43.5%) of the library managers with the scores ranging from 59 to 65 are aware of preservation practices in the UNESCO conservation guidelines to a very high extent while 20(43.5%) of the library managers who scored between 46 and 58 aware of them to high extent.

What are the library managers’ scores on the extent they adopt the preservation practices in the UNESCO conservation guidelines?

Table 2: Range of scores of library managers on the extent they adopt the preservation practices in UNESCO conservation guidelines

<table>
<thead>
<tr>
<th>Range of scores</th>
<th>N</th>
<th>%</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 – 19</td>
<td>0</td>
<td>0</td>
<td>Very low extent</td>
</tr>
<tr>
<td>20 – 32</td>
<td>1</td>
<td>2.2</td>
<td>Low extent</td>
</tr>
<tr>
<td>33 – 45</td>
<td>5</td>
<td>10.8</td>
<td>Moderate extent</td>
</tr>
<tr>
<td>46 – 58</td>
<td>16</td>
<td>34.8</td>
<td>High extent</td>
</tr>
<tr>
<td>59 – 65</td>
<td>24</td>
<td>52.2</td>
<td>Very high extent</td>
</tr>
</tbody>
</table>

Table 2 shows that 24(52.2%) of the library managers with the scores ranging from 59 to 65 adopt preservation practices in the UNESCO conservation guidelines to a very high extent while 16(34.8%) of the library managers who scored between 46 and 58 adopt them to high extent.

There is no significant difference in the mean scores of library managers on the extent they adopt the preservation practices in the UNESCO conservation guidelines based on the status of their university.

Table 3: t-test on the mean scores of federal and state library managers on the extent they adopt the preservation practices in the UNESCO conservation guidelines

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>N</th>
<th>X</th>
<th>sddf</th>
<th>Cal.t</th>
<th>Pvalue</th>
<th>P ≥ 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>26</td>
<td>57.65</td>
<td>8.79</td>
<td>44</td>
<td>1.29</td>
<td>0.204</td>
</tr>
<tr>
<td>State</td>
<td>20</td>
<td>54.30</td>
<td>8.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that at 0.05 level of significance and 44df the calculated t1.29 with P-value of 0.204 which is greater than the critical 0.05, the fifth null hypothesis is therefore accepted. Then, there is no significant difference in the mean scores of federal and state university library managers on the extent they adopt the preservation practices in the UNESCO conservation guidelines.

CONCLUSION

The findings of this study indicated that few of the library managers 20(43.5%) are aware of preservation practices in the UNESCO conservation guidelines to a very high extent while 20(43.5%) of the library managers are aware of them to high extent. This finding might have been as a result of their level of education and long years of training, conferences and workshops attended by the university library managers both local and International. Although the managers might not actually practice the preservation practices indicated in the UNESCO Conservation Guidelines but are aware of its content to an extent. The findings of this study supported the
findings of Olatokun (2008) which affirmed that Librarians engaged in conservation which involves the preservation activities.

The findings revealed that the few of the library managers 24(52.2%) adopt preservation practices in the UNESCO conservation guidelines to a very high extent while 16(34.8%) of the library managers adopt them to high extent. According to this result, the University library managers adoption is not in line with the UNESCO Conservation Guidelines in their preservation practices. This is because the library managers have been observing a related preservation practices. The result of this study negates the findings of the Ogbodo (2011) who found out that preservation practices are not being followed in a polytechnic. However, the scope of the present study is in the university which implicates that the reverse of what happens in the universities could be what is obtainable in the polytechnics.

With regards to the hypothesis tested in this work, it was observed that there is no significant difference in the mean scores of federal and state university library managers on the extent they are aware of the preservation practices in the UNESCO Conservation Guidelines.

RECOMMENDATION

1. Government should conduct workshops, seminars and conferences for library managers on the UNESCO Conservation Guidelines to enable them acquire more and balanced knowledge needed in using the UNESCO Conservation Guidelines.

2. The university should provide an enabling environment to help the library managers work effectively and use the UNESCO Conservation Guidelines in their preservation practices.

3. There should be adequate funding of conferences and seminars by the federal government for Library Managers improvement.

REFERENCES


