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THE EXTENT OF AWARENESS AND ADOPTION OF UNESCO CONSERVATION GUIDELINES ON RESTORATION PRACTICES BY UNIVERSITY LIBRARY MANAGEMENT IN SOUTH EAST NIGERIA.

By

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ABSTRACT

This study is an attempt to find out the extent of awareness and adoption of UNESCO conservation guidelines on restoration practices by university library management in South East Nigeria. The study was guided with two (2) research questions and one (1) hypothesis. A survey research design approach was adopted for the study, with target area on university library management in south east Nigeria. The questionnaire was used as the research instrument for data collection, which was subjected to a reliability test using the cronbach alpha statistics which gave an alpha value of $\alpha=0.90$. The study found that the extent of awareness of the UNESCO conservation guideline on restoration practices by the university library management in south east universities is significantly high with a pooled mean value of 3.93 ± 0.70 . The extent of adoption of the UNESCO conservation guideline on restoration practices by the university library management in south east universities is very low with a pooled mean value of 1.74 ± 0.14 . There is a significant difference between university library management's extent of awareness and extent of adoption of UNESCO restorative practices. It was however recommended that... Government should conduct workshops, seminars and conferences for university library management and staff on the UNESCO Conservation Guidelines to enable them acquire more and balanced knowledge needed in using the UNESCO Conservation Guidelines.

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

There should be adequate funding of conferences and seminars by the government for staff improvement.

Keywords: Adoption, Awareness, Conservation, Extent, restoration.

INTRODUCTION

The academic library plays a crucial role in information dissemination. According to Mason (2010), an academic library has the sole task of building and maintaining a collection that will support and augment the instructional needs of a higher institution. Aina (2004) posited that the purpose of library is to collect information

materials, organize, store, preserve and disseminate information to users at the right time and in the right measure. Okiyi (2012) notes that the roles of libraries are similar and that is to effectively support institutions to attain the key functions of teaching, learning, research and community service. However, for libraries to succeed, the library materials needs to be conserved, besides proper dissemination of Library materials, the materials are said not to be useful if the materials are not in good and usable condition. This calls for proper conservation of library materials. The proper or effective conservation of library materials in the university libraries is dependent on the extent of awareness and adoption of UNESCO Conservation Guidelines by the University libraries Management.

Library materials are all the information and allied resources acquired by any University library for the provision of library and information services to the library users. 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).

University libraries in Nigeria are generally believed to practice conservation of library Materials which aims to ensure the longevity and safety of information resources. In spite of their involvement in conservation practices, there are still observable cases of damage in most of the University libraries as exposed by the researches of popoola (1999) and Njeze (2012) with the implication that vital resources are lost and meeting the information needs of the users often impaired. More worrisome is the fact that available researches from literature show that almost all the researches focused only on conservation practices as found in the University libraries without relating them to the UNESCO Conservation Guidelines.

Consequently, there is hardly any empirical evidence to show whether the conservation practices going on among library Management in university libraries in Nigeria follows the UNESCO Conservation Guidelines. There is therefore an unexplained relationship between Conservation practices among library management in University libraries in Nigeria and the UNESCO Conservation Guidelines.

This study therefore, tries to determine the extent of awareness and adoption of UNESCO conservation Guidelines on restoration practices by university library management in South-Eastern Nigeria.

Objective of the Study

The main objective of this study is to find out the extent of awareness and adoption of UNESCO conservation Guidelines on restoration practices by university library management in South-Eastern Nigeria.

Specifically, the study will find out the extent to which:

1. University libraries Management are aware of the restoration practices in the UNESCO conservation Guidelines.
2. University libraries Management adopt restoration practices in the UNESCO Conservation Guidelines.

Research Questions

To achieve the foregoing purposes, the following Research questions are posed:

1. To what extent are the South Eastern Nigerian University Libraries Management aware of the restoration practices in the UNESCO Conservation Guidelines?
2. What are the restoration practices that are adopted from UNESCO Conservation Guidelines by the South Eastern Nigerian University Libraries Management?

Hypothesis

1. There is no significant difference between university library management' extent of awareness and extent of adoption of UNESCO restoration practices

2. LITERATURE REVIEW

Conservation

The term 'Conservation' has been defined in the IFLA Principles for the Care and Handling of Library materials (2010) as "specific practices taken to slow down deterioration and prolong the life span of an object by direct intervening in its physical or chemical make-up.

According to Reitz (2004), conservation implies the use of physical or chemical methods to ensure the survival of manuscripts, books, and other documents, for example, the storage of materials under controlled environmental conditions or the treatment of mildew-infected paper with a chemical inhibitor.

The Objective of conservation

Adebayo (2004) claimed that the goal of any conservation is to ensure long term, ready access to the information resources of an institution. (Smith, 1999) asserts that Conservation involves prudent collection management. For example, sound techniques for binding materials such as periodicals and unbound monographs are important, because the way these materials are bound determines how long they will last and how easily the contents can be accessed. Without conservation, access becomes impossible and collections decay and disintegrate.

The sole aim of Conservation is to ensure stabilization and protection of records against dangers and also correction of damaged wealth. The priority of placing materials in conservation is based on their rate of deterioration. The more rapidly decaying materials are given first importance than others. More so, library conservation aims to encourage the proper care and accessibility of research materials, to promote the use and development of guidelines and technical standard for conservation work.

Thus the main aim of conservation is to keep library and archival materials in their original format for as long as possible. Library and archival materials can be preserved through remedial treatment of individual materials (flattening book and paper repair, binding), treatment of an entire collection (mass de-acidification, fumigation), and stabilization (surface cleaning, new containers, protective enclosures).

Conservation can be categorized as preservative conservation and restorative conservation. However this study focuses on the restorative practices

Restorative Conservation

Restoration is the specialized repair by conservators of damaged objects that aims to restore objects to a known or assumed condition and appearance. It does not attempt to control deterioration of objects. It utilizes such practices as comprehensive cleaning and refinishing, and replacement of broken parts with non-original materials. Restoration treatments are not necessarily reversible outside the library field; restoration survives as a specialized field that provides skilled repair to valuable collections in current use. Restoration is all actions directly applied to a single and stable item aimed at facilitating its appreciation, understanding and use.

These actions are only carried out when the item has lost part of its significance or function through past alteration or deterioration. They are based on respect for the original material. Most often such action modifies the appearance of the item. Examples of restoration are retouching a painting, reassembling a broken sculpture, reshaping a basket, filling losses on a glass vessel.

Restoration aims to return the book to its original appearance for instance original parts of the binding are used if they are intact; damaged parts may be cut away and new material of similar type and appearance substituted. The new material is selected, colored, and textured to look like the old; decorative elements that have been lost are reconstructed.

Restorative Measures

Reformatting

Chapman, Conway and Kenney, (1999) stated that in attempts to preserve content of writings, librarians and archivists are transferring text to media such as microfilm or various magnetic media in a process called reformatting. Reformatting also includes the digitization of information that consists of transfer of content to optical discs or other electronic storage systems.

Deacidification

Ngulube(2003); Hunter(1977) stated that acidity is the major cause of deterioration of non-alkaline permanent paper. Acidity attacks the cellulose in paper, breaks down the fibre and weakens the paper. Deacidification is one major technique for preserving books and records. It is a technique reserved for books that are acidic and at risk of loss if no action is taken.

Binding:

Crespo, Carmen and Vinas, Vicente (2009) stated that Binding entails dismantling and reassembling the entire volume if the leaves need treatment or if the binding has become weak.

Photocopying

Ojo-Igbinoba (1993) says that Photocopying is used to prolong the lifespan of the library collection. However, Ngulube (2003) noted that photocopies lack permanence if they are not done on acid-free paper. Therefore, this operation needs to be handled with care.

Lamination: - lamination is another technique used to restore a book or document into a useable condition. Lamination provides protective waterproof of transparent cover to all varieties of documents.

Encapsulation: According to Twain Mark (2011), Encapsulation is a method of safely protecting flat items between two sheets of clear polyester film, often referred to as Mylar. The Mylar allows a document to be handled without the transfer of harmful oils from your skin that could lead to further damage, as well as creating a microclimate around the document.

Fumigation

Fumigation is the process of exposing documents to chemical fumes known as fumigants in order to arrest biological infestation of microorganisms such as fungi, insects and rodents.

The UNESCO Conservation Guidelines

According to Bokova (2009) The United Nations Educational, Scientific and Cultural Organization (UNESCO) were born on 16 November 1945. UNESCO's mission is to contribute to the building of a culture of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, Communication and information. 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. Based on this study, the guidelines to be used for this work will be in one part which is the restoration guidelines. In the area of restoration, the Guidelines provides for basic principles for restoration and repair, fumigation, Deacidification, Lamination, Encapsulation. Bindings and shelving.

3. Theoretical Framework

This study was guided by the theory of operational conservation. The Operational Conservation Theory is defined as a body of systematic thought which provides

guidance to conservators, to curators, to museum staff, to responsible administrators and funding bodies - even to the general public, concerning how to deal with cultural heritage as it is expressed in physical form and shape (Brock, George, 2010). The theory was propounded by George Brock in 1987. The basis for Operational Conservation Theory is that all objects or artifacts which surround us contain information of various kinds. (Brock, G, 1997). Obviously these artifacts like drawing, painting or photograph were not all made just to provide information, but many - perhaps most - were made to have a function or useful purpose. When their function has worn out they may be repaired, thereby regaining their function, but this changes the information. Or they may be retained in their worn out condition - this retains some information, and the *function* is now a different one, namely that of library materials or collector's item. One of the important functions is that of a symbol - the artifact symbolizes something which at some stage is or has been important to humans.

4. Empirical Studies

Olatokun (2008) carried out a study on the various techniques used in the preservation and restoration of library materials in selected university libraries in Nigeria. It particularly examined the causes and nature of deterioration, patterns and strategies used in their control, existence of restoration policies and constraints limiting effective restoration. The survey approach was adopted for the study. The result of the study shows that the most used techniques of print and non-print materials in the university libraries is cleaning and dusting which is 5.219% followed by photocopying the materials-3.03%, to have duplicates while re-binding is 2.23% and Shelving library materials to allow for free flow of air is 2.15%. The study findings also revealed that cleaning and dusting of library materials was the commonly used technique. The findings of the study also revealed that restoration techniques, though adopted in the university libraries were not effectively used.

Asiamah(2008), carried out a case study of the Kwame Nkrumah University of Science and technology Main library in Ghana. The study was on preservation of print and non-print library materials .The findings reviewed that physical building,

storage practices, pollution, light, and biological agents, security of library materials as well as the poor handling of library materials were major constraints that the university library faced in the area of preservation and conservation of library materials.

Arnoult(1980) conducted a survey on the state of restoration of archives and library materials in Kenya. The study concluded that there were no consistent policies on the restoration of archives and Library Materials. The collections were housed in rooms with leaking roofs, insecure doors and large unprotected windows, and were poorly maintained.

Ogbodo Catherine (2011) researched on Preservation of Information Sources in Polytechnic Libraries in South East States of Nigeria. The study was aimed at examining the preservation of information sources in polytechnic libraries in South Eastern States of Nigeria. The entire Population of 33 academic libraries was used for the study. A questionnaire was used to gather data and the results showed among others that there were problems of preservation of information sources in polytechnic Libraries in Nigeria. These polytechnic libraries use ineffective methods to combat the problems of preservation. It was recommended that adoption of digital technology in preservation among others could help these Libraries preserve their materials effectively.

Kimbo Lemmy Shameend(2011) research investigated preservation and conservation of library materials, techniques and practices in the University of Zambia Library and its two branches: the Medical Library and the Samora Michel Veterinary Medicine Library. The population of the study was thirty-five library staff, six bindery staff and eleven academic faculty members in the Department of Library and Information Studies at the University of Zambia. Based on a questionnaire survey, interviews, observation and content analysis of key documentary sources, the factors that affect preservation and conservation of library materials in the University libraries were identified. The research findings revealed that although the University of Zambia Libraries were involved in the long-term preservation of library materials, they did not provide a well planned preservation and conservation care because preservation aspects were given least priority and conservation programmes were addressed in varying degrees in the libraries.

5. Methodology

A survey research design was adopted for the study. The university libraries in South- Eastern zone of Nigeria were used for this study. The target population for this study is the entire University library Management in the university libraries in South-Eastern zone of Nigeria. The population of the study is 172 university library Management. The sample for the study will include 81 university library management. The research instrument that was used to collect data for the study was questionnaire. Twenty copies of the questionnaire were distributed to twenty librarians from the University of Portharcourt for the test of the reliability of the instrument using split-half method. After collecting the filled copies of the questionnaire, Cronbach's Alpha statistic was used to obtain the reliability which is $\alpha = 0.90$. Mean and standard deviation were used to analyze the research questions while t-test was used test the hypothesis.

6. Data Analysis

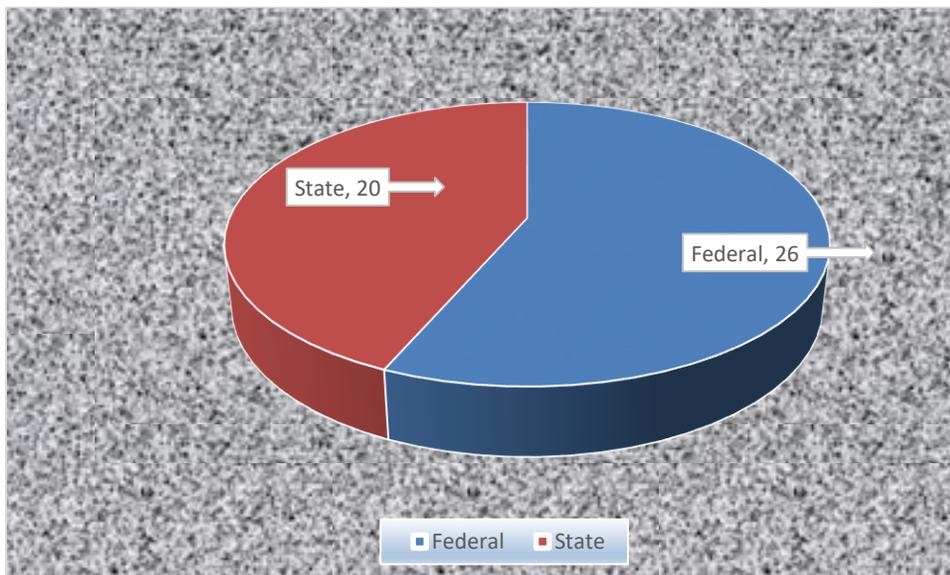


Fig.1: Representation of Library Management Based on Type of Institution

The figure above shows the pie chart representation of the respondents based on the type of university employed. 56.5 % (26) of the respondents are employed in Federal Universities while 43.5 % (20) of the respondents are employed in state universities. This shows that more than 50% of the respondents are from Federal universities.

Research Question 1:

To what extent are university library management in South-East Nigeria aware of the restoration practices in the UNESCO Conservation Guidelines?

Table 1: The Mean Procedure for University Library Managements' Awareness of UNESCO Restoration Practices

ITEMS	DESCRIPTION	OBS	SUM	MEAN	STD DEV	DECISION
M_AW_RP_1	Provision of thymol	46	177	3.8478	0.9181	ACCEPT
M_AW_RP_2	Provision of ethylene oxide	46	181	3.9348	1.0199	ACCEPT
M_AW_RP_3	Provision of special fumigation chamber.	46	200	4.3478	0.8748	ACCEPT
M_AW_RP_4	Purchase of magnesium bicarbonate	46	172	3.7391	1.2006	ACCEPT
M_AW_RP_5	Provision of ultrasonic welding equipment	46	153	3.3261	1.3005	ACCEPT
M_AW_RP_6	Acquisition of rust-proof metal shelves such as steel.	46	202	4.3913	0.8022	ACCEPT
M_AW_RP_7	Repair of wooden shelves.	46	186	4.0435	1.0946	ACCEPT
M_AW_RP_8	Provision of overhead photocopiers.	46	183	3.9783	0.9773	ACCEPT
M_AW_RP_9	Provision of flat-bed photocopiers.	46	176	3.8261	1.0605	ACCEPT
M_AW_RP_10	Aqueous deacidification by immersing affected paper in a magnesium bicarbonate solution.	46	159	3.4565	1.2240	ACCEPT
M_AW_RP_11	Spirit deacidification by immersing affected materials in an organic solvent.	46	166	3.6087	1.3901	ACCEPT
M_AW_RP_12	Provision of adjustable Shelves.	46	194	4.2174	0.7864	ACCEPT
M_AW_RP_13	Installation of air conditioners	46	201	4.3696	0.7989	ACCEPT

ITEMS	OBS	SUM	MEAN	STD DEV	t-value	Prob	Decision
M_AW_RP	46	180.77	3.9298	0.7012	8.993	<0.0001	SIGNIFICANT

Table 1 shows that university library management' extent of awareness of UNESCO restoration practices is accepted as being above average for all the thirteen (13) items considered under UNESCO restoration practices. This is because all the items have mean scores greater than the expected value of 3.00 on a 5-point Likert scale. The item that has the highest level of awareness is M_AW_RP_6 (Acquisition of rust-proof metal shelves such as steel) with a mean awareness rating of 4.39 on a 5-point Likert scale. This is followed by M_AW_RP_13 (Installation of air conditioners) with a mean awareness rating of 4.37. The item that has the lowest level of awareness is M_AW_RP_5 (Provision of ultrasonic welding equipment) with a mean awareness rating of 3.33 on a 5-point Likert scale.

Furthermore, the table also indicates that the overall extent of awareness of UNESCO restoration practices by university library management is 3.93 with a standard deviation of 0.70 on a 5-point Likert scale. The computed t-value is 8.993 with an associated significance probability of <0.0001, which is less than 0.05. Thus, the test is significance at 5% level of significance, since $P < 0.05$. We therefore conclude that the extent of awareness of restoration practices in the UNESCO Conservation Guidelines by university library management in South-East Nigeria can be said to be significantly above average.

Research Question 2:

What is the extent to which restoration practices in the UNESCO Conservation Guidelines are adopted by university library management in South-East Nigeria?

Table 2: The Mean Procedure for University Library Management' Adoption of UNESCO Restoration Practices

ITEMS	DESCRIPTION	OBS	SUM	MEAN	STD DEV	DECISION
M_AD_RP_1	Provision of thymol	46	54	1.1739	0.3832	REJECT
M_AD_RP_2	Provision of ethylene oxide	46	55	1.1957	0.4011	REJECT

M_AD_RP_3	Provision of special fumigation chamber.	46	57	1.2391	0.4313	REJECT
M_AD_RP_4	Purchase of magnesium bicarbonate	46	55	1.1957	0.4011	REJECT
M_AD_RP_5	Provision of ultrasonic welding equipment	46	54	1.1739	0.3832	REJECT
M_AD_RP_6	Acquisition of rust-proof metal shelves such as steel.	46	55	1.1957	0.4011	REJECT
M_AD_RP_7	Repair of wooden shelves.	46	62	1.3478	0.4815	REJECT
M_AD_RP_8	Provision of overhead photocopiers.	46	59	1.2826	0.4552	REJECT
M_AD_RP_9	Provision of flat-bed photocopiers.	46	64	1.3913	0.4934	REJECT
M_AD_RP_10	Aqueous deacidification by immersing affected paper in a magnesium bicarbonate solution.	46	61	1.3261	0.4740	REJECT
M_AD_RP_11	Spirit deacidification by immersing affected materials in an organic solvent.	46	62	1.3478	0.4815	REJECT
M_AD_RP_12	Provision of adjustable Shelves.	46	202	4.3913	0.4934	ACCEPT

M_AD_RP_13	Installation of air conditioners	46	201	4.3696	0.4880	ACCEPT
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ITEMS	OBS	SUM	MEAN	STD DEV	t-value	Prob	Decision
M_AD_RP	46	80.08	1.7408	0.1408	-60.665	1.0000	NOT SIGNIFICANT

Table 2 shows that university library management' extent of adoption of UNESCO restoration practices is accepted as being above average for only two (2) out of the thirteen (13) items considered under UNESCO restoration practices. The accepted items are those with mean scores greater than the expected value of 3.00 on a 5-point Likert scale. The item that has the highest level of adoption is M_AD_RP_12 (Provision of adjustable Shelves) with a mean adoption rating of 4.39 on a 5-point Likert scale. This is followed by M_AD_RP_13 (Installation of air conditioners) with a mean adoption rating of 4.37. The items that have the lowest level of adoption are M_AD_RP_1 (Provision of thymol) and M_AD_RP_5 (Provision of ultrasonic welding equipment) with mean adoption rating of 1.17 on a 5-point Likert scale.

Furthermore, the table also indicates that the overall extent of adoption of UNESCO restoration practices by university library managers is 1.74 with a standard deviation of 0.14 on a 5-point Likert scale. The computed t-value is -60.665 with an associated significance probability of 1.0000, which is greater than 0.05. Thus, the test is not significance at 5% level of significance, since $P > 0.05$. We therefore conclude that the extent of adoption of restoration practices in the UNESCO Conservation Guidelines by university library management in South-East Nigeria is below average.

Test of Hypotheses

Hypothesis 1:

Null hypothesis: There is no significant difference between university library management' extent of awareness and extent of adoption of UNESCO restoration practices

Alternative hypothesis: There is a significant difference between university library management' extent of awareness and extent of adoption of UNESCO restoration practices

Table 3: Two Sample t-test for Differences in the Means of university library management' extent of awareness (M-AW-RP) and extent of adoption (M-AD-RP) of UNESCO restoration practices.

ITEMS	OBS	MEAN	STD DEV	t-value	Prob	DECISION
M-AW-RP	46	3.93	0.70	20.757	<0.0001	SIGNIFICANT
M-AD-RP	46	1.74	0.14			

Table 3 shows that university library management' extent of awareness of UNESCO restoration practices (M-AW-RP) with a mean rating of 3.93 is higher than the managers' extent of adoption (M-AD-RP) of the restoration practices with a mean rating of 1.74 on a 5-point Likert scale. The t-value of 20.757 with an associated probability of <0.0001 shows that the observed difference is significant at 5% level of significance, since $P < 0.05$. Thus, we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that there is a significant difference between university library management' extent of awareness and extent of adoption of UNESCO restoration practices.

Discussion

There is a high level of awareness of the restorative practices in the UNESCO conservation guidelines by the university library management in south east Nigeria, table 1 shows an overall standard mean value of 3.93 with a standard deviation of 0.70 based on the likert scale and t-value of 893 which is significant at 0.05 level of significance, however the reverse seems to e the case when it comes to its adoption, this is because table 2 reveals that the overall mean value of the extent of adoption of UNESCO restorative practices by the university library management in southeast is 174 with a standard deviation of 0.14 on a 5-point likert scale and with a computed t-value of -6066 with a p-value of 1.000 greater than 0.05 level of significance. This means that most university library management in south east universities are well aware of the UNESCO guideline but don't put it to practice. In order to ascertain if really a significant difference exist between the extent of awareness and extent of

adoption, the mean values of the responses to the items of the two variables were subjected to an independent samples t-test. Result shows that a calculated t-value of 20.757 with an associated probability of <0.0001 at 5% level of significance which indicates a significant level of difference.

Conclusion

Based on the result, the researchers made the following conclusions

1. The extent of awareness of the UNESCO conservation guideline on restoration practices by the university library management in south east universities is significantly high with a pooled mean value of 3.93 ± 0.70 .
2. The extent of adoption of the UNESCO conservation guideline on restoration practices by the university library management in south east universities is very low with a pooled mean value of 1.74 ± 0.14 .
3. There is a significant difference between university library management' extent of awareness and extent of adoption of UNESCO restorative practices.

Recommendations

1. Government should conduct workshops, seminars and conferences for university library management 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 university library management work effectively and use the UNESCO Conservation Guidelines in their preservation practices.
3. There should be adequate funding of conferences and seminars by the government for university library management improvement.

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