International Journal of Library and Information Science Studies
Vol.7, No.1, pp.35-50, 2021
Print ISSN: 2059-9056,
Online ISSN: 2059-9064

THE EXTENT OF AWARENESS AND ADOPTION OF UNESCO CONSERVATION GUIDELINES RESTORATION PRACTICES BY THE UNIVERSITY LIBRARY STAFF IN SOUTH –EAST NIGERIA

Ngozi Chima-James, Doris Obiano, Peter Moneke, Ada Uchenna Tony Okereke and Chikodi Nwakwuo

ABSTRACT: *This study is to find out the extent of awareness and adoption of UNESCO Conservation Guidelines restoration practices by the university library staff in south east Nigeria. The instrument for data collection was questionnaire. The statistical tests used in the data analysis included the summated score and t-test. The research questions were analyzed using the Summated score while the hypotheses were tested using the t-test. The result shows that university library staff extent of awareness of UNESCO restoration practices is accepted as being above average for only three (3) out of the twenty-two (22) 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. We therefore conclude that there is a significant difference between university library staff extent of awareness and extent of adoption of UNESCO restoration practices. Furthermore, the result also indicates that the overall extent of awareness of UNESCO restoration practices by university library staff is 1.94 with a standard deviation of 0.27 on a 5-point Likert scale. The computed t-value is −64.540 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 awareness of restoration practices in the UNESCO Conservation Guidelines by university library staff in South-East Nigeria is below average. The result also shows that the university library staff extent of adoption of UNESCO restoration practices is accepted as being above average for only three (3) out of the twenty-two (22) 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. Furthermore, the reslt also indicates that the overall extent of adoption of UNESCO restoration practices by university library staff is 1.57 with a standard deviation of 0.15 on a 5-point Likert scale. The computed t-value is −155.561 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 staff in South-East Nigeria is below average. Based on the findings, we recommends that: Government should sponsor Library staff to workshops, seminars and conferences nationally and internationally on the UNESCO Conservation Guidelines for acquisition of better Knowledge needed in using the UNESCO Conservation Guidelines.The university should provide an enabling environment to help the university library staff work effectively and use the UNESCO Conservation Guidelines in their restoration practices. The University Library staff should visit other Institutions of higher learning that uses UNESCO Conservation Guidelines for better knowledge, improvement and greater productivity.*

KEYWORDS: Extent, awareness, adoption, restoration practices, staff

INTRODUCTION

The academic library is the epicenter of academic activities in any tertiary institution and it is the principal source of knowledge and information within the tertiary system and the world around it.

Therefore, an effective use of it is as compelling as it is necessary. Edom (2012) opined that academic libraries are primarily established to support and enhance tripartite functions and the full realization of the education goals of the parent institutions.

The splendor of libraries or information centres housing intellectual materials (printed or non-printed) is demonstrated when it stands the test of time and meets the information needs of the users to satisfaction. Preservation, conservation and restoration of library materials all over the globe today is one of the major functions of the academic library. They acquire these materials regularly and they also make provision for its shelter. The issue of restoring these materials when deteriorated for generations to come has been a serious concern on the libraries.

Restoration is the act of returning the deteriorated item to its original or near original conditions. Restoration according to International Council of Museums-Committee for Conservation (ICOM-CC, 2008) means all actions directly applied to a single and stable item aimed at facilitating its appreciation, understanding and use. The actions are only carried out when the item has lost part of its significance or functions through past alteration and deterioration. They are based on respect for the original material. Most often, such actions modify the appearance of the item. Example of restoration includes treatment, replacement and reformatting. 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. Restoration comprises remedial conservation which is all actions directly applied to an item or a group of items aimed at arresting current damaging processes or reinforcing their structure. These actions sometimes modify the appearance of the item. Examples of remedial conservation are disinfestations of materials, de-acidification of paper, dehydration of wet materials, and replacement of lost materials.

Restoration Guidelines that must be followed strictly before restoration of library materials will be effective and efficient to ensure the longevity and safety of library materials has been provided by UNESCO. However, it is imperative that library materials restoration practices guidelines as embedded in UNESCO Conservation Guidelines be properly and adequately utilized and maintained not only to restore loss and damage books but to provide library safe for quality service delivery to library users both now and in the future. The researcher has observed with dismay that the library staff seem to be carrying out their conservation practices in different ways that are not based on the UNESCO Conservation Guidelines. This has not helped to improve the conservation of the library materials in university library as the practices by these library staff seem confusing, there is therefore, a gap in relation to knowing the extent to which university library staff are aware of and adopt the UNESCO Conservation Guidelines in South –East, Nigeria. Based on the above observations, the researcher is therefore motivated to study the extent of awareness and adoption of UNESCO Conservation Guidelines restoration practice by university library staff in the South-East, Nigeria. The UNESCO Conservation Guidelines are the blue print for sound restoration of library materials.

Objectives of the Study

The main objective of this study was to find out the extent of awareness and adoption of UNESCO Conservation Guidelines restoration practices by university library staff of the South-East Nigeria. Specifically, the study sought to find out the extent to which the university:

1. Library staff are aware of the UNESCO Conservation Guidelines restoration practices.
2. Library staff adopts the UNESCO Conservation Guidelines restoration practices.

Research Questions

The following research questions guided the study:

1. To what extent are the university library staff aware of the UNESCO Conservation Guidelines restoration practices?

2. To what extent does the university library staff adopt the UNESCO Conservation Guidelines restoration practices?

Testing the null Hypotheses

The following null hypotheses were tested at 0.05 level of significance:
Null hypothesis 1: There is no significant difference on the extent the university library staff are aware of the UNESCO Conservation Guidelines restoration practices due to the status of their University.

Null Hypothesis 2:

There is no significant difference on the extent the university library staff adopt the UNESCO Conservation Guidelines restoration practices due to the status of their University.

LITERATURE REVIEW

Restoration

Restoration according to *Canadian Conservation Institute (2002) 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. Panage, and Bonde,(2013)stated that restoration denotes those techniques and judgments used by technical staff engaged in the making good of library material damaged by time, use and other factors .It is a technical area and needs special skills, which may not be possible for every librarian to possess it.

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, coloured, and textured to look like the old; decorative elements that have been lost are reconstructed. According to the University of Michigan there are three basic requirements which any good restoration process should meet. They are legibility, permanency, and durability. Each will be described briefly.

Legibility-The readability of the restored item should not be reduced appreciably.
Permanency-In order to ensure permanency, the impurities which caused deterioration of the item should be removed or made inert. The materials used to strengthen the sheet should be chemically pure and stable and should be resistant to the harmful action of certain agents present under normal storage condition and usage. In addition, the process used should not reduce the permanency of the item treated.

Durability-After restoration, items which will get much use should have both good resistance to tearing and folding endurance. Seldom used items, such as exhibit pieces, may have a lower requirement. All of these qualities are needed and one of them should not be overemphasized to the extent that the others will suffer materially. Many restoration processes have proved to be unsatisfactory because their product did not meet all three of the requirements.

Causes of deterioration

Mahapatra and Chatevabarti (2003), proposed that the following physical and chemical situations are responsible for deterioration of documents, either by one or more.

1. Natural aging of paper since the major constituents are of organic nature. Such inevitable deterioration can be minimized to a large extent by proper housekeeping.

2. In the manufacturing of paper sometimes fibres are used with low cellulose content or sometimes noncellulose materials of the lignin type are used by which paper becomes degenerated very easily.

3. Mineral and chemical compounds used as basic constituents of paper affect the durability of paper.

4. Impurities in the ingredients used as basic constituents of paper cause inevitable deterioration.

5. Presence of acidic sizing materials such as, alum, rosin, etc, causes the acidic effect.

6. Oxidizing agents present in the constituents of paper make the paper weak, discoloured and disintegrated. Presence of metal accelerates oxidation.

7. Alkalis used in the manufacture of paper affect it if used in a higher quality. Fungi grow very easily on such paper.

8. Heat and exposure to light make the paper brittle and fade in colour.

9. Dust particles make the paper discoloured, invite chemical impurities and accelerate biological growth.

10. Acidic impurities present in the atmosphere make the paper discoloured and degenerated.

11. Sulphyric acid is formed from Sulphur dioxide present in the air.

12. Moisture and humidity by which not only the tissues of paper are disintegrated but also conditions are created for biological attack.

13. Films are very sensitive to excessive heat, dryness, humidity and moisture.

14. Chemicals present in audio-visual materials can cause deterioration under adverse environmental condition.

15. Because of the basic elements used in the audio or video tape, deterioration is caused for physical and chemical change within the materials under adverse environmental condition

Restorative practices

Shelving

North east Document Conservation Center Preservation Leaflets Disaster Assistance (2012) opined 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. It is recommended that metal shelves be used in storage areas. Wooden shelves are often treated with varnishes that cause damage to organic materials and wood is a food source for many insects.

Lamination

Lamination is a technique used to restore a book or document into a useable condition. According to Mohammed (2006) Lamination involves placing the original document together with back-up sheet impregnated with adhesives in a hot press. The heat and pressure activate the adhesive, which eventually fixes or laminates the back-up to the original. Lamination provides protective waterproof of transparent cover to all varieties of documents.

Lamination guidelines are as follows

- Lamination of paper documents.
- Lamination with machine by testing for acidity first and deacidify before lamination.
- Manual lamination by employing florentine repair.
- Manual repair by employing spirit lamination.

Encapsulation

According to Twain (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. Encapsulation guidelines are as follows:

- Encapsulation with an envelope of inert transparent polyester film like 'Mylar'.
- Encapsulation by ultrasonic welding
- Encapsulation by heat sealing.

Fumigation

Fumigation continues to play a valuable role in many pest control operations; however, both the concepts and the procedures for controlling insects and other organisms are changing. The guidelines stipulates the following

- Fumigation of library with chemical (ethyleneoxide)
- Fumigation using special fumigation chamber.

Binding

Crespo and Vinas (2009) stated that binding entails dismantling and reassembling the entire volume if the leaves need treatment or if the binding has become weak. A careful record of the order and arrangement of each book is indispensable so as to avoid mistakes when rebinding.

Deacidification

Ngulube (2003) 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. Deacidification: The guidelines stipulates the following deaccidification practices:

- Aqueous deacidification by immersing affected paper in an alkaline solution (magnesium bicarbonate)
- Aqueous deacidification by brushing an affected paper with, an alkaline solution (magnesium bicarbonate)
- Spirit deacidification by immersing the affected paper in alkali dissolved or suspended in an organic solvent.
- Spirit deacidification by spraying the alkali solution at affected material.
- Mass deacidification by the use of a vacuum chamber for bound volumes only.

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. It is true that there are several Conservation Guidelines like American library Association Conservation Guidelines (ALA), IFLA Conservation Guidelines and so on. However, I have tried to use UNESCO Conservation Guidelines as my benchmark because it is all encompassing. 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.

Restoration guidelines. In the area of restoration, the Guidelines provides for basic principles for restoration and repair, fumigation, Deacidification, Lamination, Encapsulation, Bindings and shelving. Fumigation: The guidelines stipulates the following

- Fumigation of library with chemical (ethyleneoxide)
- Fumigation using special fumigation chamber.

Deacidification: It includes

- Aqueous deacidification by immersing affected paper in an alkaline solution (magnesium bicarbonate)
- Aqueous deacidification by brushing an affected paper with, an alkaline solution (magnesium bicarbonate)
- Spirit deacidification by immersing the affected paper in alkali dissolved or suspended in an organic solvent.
- Spirit deacidification by spraying the alkali solution at affected material.
- Mass deacidification by the use of a vacuum chamber for bound volumes only.

Lamination guidelines are as follows

- Lamination of paper documents.
- Lamination with machine by testing for acidity first and deacidify before lamination.
- Manual lamination by employing florentine repair.
- Manual repair by employing spirit lamination.

Encapsulation guidelines are as follows:

- Encapsulation with an envelope of inert transparent polyester film like 'Mylar'.
- Encapsulation by ultrasonic welding
- Encapsulation by heat sealing.

Binding guidelines includes:

- Bindings by restoring the document in exactly the same style and materials as the original.

Shelving guidelines: Book storage with rust-proof metal shelves such as steel (non-combustible and non-deteriorating).
Book storage with wooden shelves.
Shelving with a minimum distance of 10 cm off the floor
Usage of adjustable shelves to allow maximum use of the shelf space available.

Shelve books so that they are not difficult to remove or replace to avoid damage.
Photocopying with overhead photocopiers.

METHODOLOGY

The research design that was adopted for this study is the survey research design. The university libraries in South- Eastern zone of Nigeria were used for this study and they include Abia, Anambra, Ebonyi, Enugu and Imo States. The population of the study consisted 623 university library staff excluding private universities. The method of simple random sampling without replacement (SRSWOR) scheme was used to select independent samples 300 university library staff (about 48% of library staff) The use of the SRSWOR procedure ensured that the sample is a random sample and a good representation of the entire population. Akuezuilo & Agu, (2015) supported the use of 50%.

The instrument that was used to collect data for the study was questionnaire. Thirty (30) copies of the questionnaire for library staff were distributed to randomly selected university library staff for the test of the reliability of the instrument. The selected respondents used for the reliability tests were not included in the main survey sample. The university staff was from the University of Port Harcourt Rivers State. Similarly, the calculated Cronbach's alpha coefficient for the questionnaire for university library staff was obtained as 0.81. We therefore conclude that the questionnaire were reliable since the Cronbach's alpha coefficient is greater than 0.75

Method of Data Analysis

The statistical tests used in the data analysis included the summated score and *t*-test. The research questions were analyzed using the Summated score while the hypotheses were tested using the *t*-test

RESULT

Research Question 1

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

Table 1, The Mean Procedure for University Library Staff Awareness of UNESCO Restoration Practices

ITEMS	DESCRIPTION	OBS	SUM	MEAN	STD DEV	DECISION
S_AW_RP_1	Fumigation of library with chemical (thymol)	270	451	1.6704	0.8529	REJECT
S_AW_RP_2	Fumigation of library with chemical (ethyleneoxide)	270	479	1.7741	0.7693	REJECT
S_AW_RP_3	Fumigation using special fumigation chamber.	270	524	1.9407	0.7786	REJECT
S_AW_RP_4	Aqueous deacidification by immersing affected paper in an alkaline solution (magnesium bicarbonate)	270	539	1.9963	0.8112	REJECT
S_AW_RP_5	Aqueous deacidification by brushing an affected paper with, an alkaline solution (magnesium bicarbonate)	270	432	1.6000	0.7537	REJECT
S_AW_RP_6	Spirit deacidification by immersing the affected paper in alkali dissolved or suspended in an organic solvent.	270	411	1.5222	0.6881	REJECT
S_AW_RP_7	Spirit deacidification by spraying the alkali solution at affected material.	270	420	1.5556	0.7128	REJECT
S_AW_RP_8	Mass deacidification by the use of a vacuum chamber for bound volumes only.	270	434	1.6074	0.6962	REJECT
S_AW_RP_9	Lamination of paper documents.	270	411	1.5222	0.6318	REJECT
S_AW_RP_10	Lamination with machine by testing for acidity first and deacidify before lamination.	270	420	1.5556	0.6753	REJECT
S_AW_RP_11	Manual lamination by employing florentine repair.	270	455	1.6852	0.8321	REJECT
S_AW_RP_12	Manual repair by employing spirit lamination.	270	432	1.6000	0.7183	REJECT
S_AW_RP_13	Encapsulation with an envelope of inert transparent polyester film like 'Mylar'.	270	423	1.5667	0.6798	REJECT
S_AW_RP_14	Encapsulation by ultrasonic welding	270	400	1.4815	0.6989	REJECT
S_AW_RP_15	Encapsulation by heat sealing	270	430	1.5926	0.6930	REJECT

Table 1, Contd:

ITEMS	DESCRIPTION	OBS	SUM	MEAN	STD DEV	DECISION
S_AW_RP_16	Bindings by restoring the document in exactly the same style and materials as the original.	270	391	1.4481	0.5873	REJECT
S_AW_RP_17	Book storage with rust-proof metal shelves such as steel (non-combustible and non-deteriorating).	270	394	1.4593	0.5689	REJECT
S_AW_RP_18	Book storage with wooden shelves.	270	1104	4.0889	0.3219	ACCEPT
S_AW_RP_19	Shelving with a minimum distance of 10 cm off the floor	270	389	1.4407	0.4974	REJECT
S_AW_RP_20	Usage of adjustable shelves to allow maximum use of the shelf space available.	270	1100	4.0741	0.2624	ACCEPT
S_AW_RP_21	Shelve books so that they are not difficult to remove or replace to avoid damage.	270	1096	4.0593	0.2365	ACCEPT
S_AW_RP_22	Photocopying with overhead photocopiers.	270	407	1.5074	0.5227	REJECT

ITEMS	OBS	SUM	MEAN	STD DEV	t-value	Prob	Decision
S_AW_RP	270	524.64	1.9431	0.2691	−64.540	1.0000	NOT SIGNIFICANT

Table 1 shows that university library staff extent of awareness of UNESCO restoration practices is accepted as being above average for only three (3) out of the twenty-two (22) 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 awareness is S_AW_RP_18 (Book storage with wooden shelves) with a mean awareness rating of 4.09 on a 5-point Likert scale. This is followed by S_AW_RP_20 (Usage of adjustable shelves to allow maximum use of the shelf space available) with a mean awareness rating of 4.07. The item that has the lowest level of awareness is S_AW_RP_19 (Shelving with a minimum distance of 10 cm off the floor) with a mean awareness rating of 1.44 on a 5-point Likert scale.

Furthermore, the table also indicates that the overall extent of awareness of UNESCO restoration practices by university library staff is 1.94 with a standard deviation of 0.27 on a 5-point Likert scale. The computed t-value is −64.540 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 awareness of restoration practices in the UNESCO Conservation Guidelines by university library staff in South-East Nigeria is below average.

Research Question 2:

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

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

ITEMS	DESCRIPTION	OBS	SUM	MEAN	STD DEV	DECISION
S_AD_RP_1	Fumigation of library with chemical (thymol)	270	270	1.0000	0.0000	REJECT
S_AD_RP_2	Fumigation of library with chemical (ethyleneoxide)	270	270	1.0000	0.0000	REJECT
S_AD_RP_3	Fumigation using special fumigation chamber.	270	331	1.2259	0.4190	REJECT
S_AD_RP_4	Aqueous deacidification by immersing affected paper in an alkaline solution (magnesium bicarbonate)	270	355	1.3148	0.4653	REJECT
S_AD_RP_5	Aqueous deacidification by brushing an affected paper with, an alkaline solution (magnesium bicarbonate)	270	344	1.2741	0.4469	REJECT
S_AD_RP_6	Spirit deacidification by immersing the affected paper in alkali dissolved or suspended in an organic solvent.	270	350	1.2963	0.4575	REJECT
S_AD_RP_7	Spirit deacidification by spraying the alkali solution at affected material.	270	356	1.3185	0.4668	REJECT
S_AD_RP_8	Mass deacidification by the use of a vacuum chamber for bound volumes only.	270	327	1.2111	0.4089	REJECT
S_AD_RP_9	Lamination of paper documents.	270	294	1.0889	0.2851	REJECT

Table 2, Contd:

ITEMS	DESCRIPTION	OBS	SUM	MEAN	STD DEV	DECISION
S_AD_RP_10	Lamination with machine by testing for acidity first and deacidify before lamination.	270	320	1.1852	0.3892	REJECT
S_AD_RP_11	Manual lamination by employing florentine repair.	270	314	1.1630	0.3700	REJECT
S_AD_RP_12	Manual repair by employing spirit lamination.	270	326	1.2074	0.4062	REJECT
S_AD_RP_13	Encapsulation with an envelope of inert transparent polyester film like 'Mylar'.	270	334	1.2370	0.4261	REJECT
S_AD_RP_14	Encapsulation by ultrasonic welding	270	357	1.3222	0.4682	REJECT
S_AD_RP_15	Encapsulation by heat sealing	270	323	1.1963	0.3979	REJECT
S_AD_RP_16	Bindings by restoring the document in exactly the same style and materials as the original.	270	283	1.0481	0.2145	REJECT
S_AD_RP_17	Book storage with rust-proof metal shelves such as steel (non-combustible and non-deteriorating).	270	289	1.0704	0.2562	REJECT
S_AD_RP_18	Book storage with wooden shelves.	270	1094	4.0519	0.2221	ACCEPT
S_AD_RP_19	Shelving with a minimum distance of 15 cm off the floor	270	282	1.0444	0.2065	REJECT
S_AD_RP_20	Usage of adjustable shelves to allow maximum use of the shelf space available.	270	1101	4.0778	0.4015	ACCEPT
S_AD_RP_21	Shelve books so that they are not difficult to remove or replace to avoid damage.	270	1084	4.0148	0.2434	ACCEPT
S_AD_RP_22	Photocopying with overhead photocopiers.	270	309	1.1444	0.3522	REJECT

ITEMS	OBS	SUM	MEAN	STD DEV	t-value	Prob	Decision
S_AD_RP	270	423.32	1.5678	0.1513	−155.561	1.0000	NOT SIGNIFICANT

Table 2 shows that university library staff extent of adoption of UNESCO restoration practices is accepted as being above average for only three (3) out of the twenty-two (22) 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 S_AD_RP_20 (Usage of adjustable shelves to allow maximum use of the shelf space available) with a mean adoption rating of 4.08 on a 5-point Likert scale. This is followed by S_AD_RP_18 (Book storage with wooden shelves) with a mean adoption rating of 4.05. The items that have the lowest level of adoption are S_AD_RP_1 (Fumigation of library with chemical (thymol)) and S_AD_RP_2 (Fumigation of library with chemical (ethyleneoxide)) with mean adoption rating of 1.00 on a 5-point Likert scale.

Furthermore, the table also indicates that the overall extent of adoption of UNESCO restoration practices by university library staff is 1.57 with a standard deviation of 0.15 on a 5-point Likert scale. The computed t-value is −155.561 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 staff in South-East Nigeria is below average.

TEST OF HYPOTHESES

Differences between extent of awareness and extent of adoption of UNESCO guidelines

Hypothesis 1:

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

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

Table1: Two Sample t-test for Differences in the Means of university library staff extent of awareness (S-AW-RP) and extent of adoption (S-AD-RP) of UNESCO restoration practices

ITEMS	OBS	MEAN	STD DEV	t-value	Prob	DECISION
S-AW-RP	270	1.94	0.27	19.975	<0.0001	SIGNIFICANT
S-AD-RP	270	1.57	0.15			

Table 1. shows that university library staff extent of awareness of UNESCO restoration practices (S-AW-RP) with a mean rating of 1.94 is higher than the staff extent of adoption (S-AD-RP) of the restoration practices with a mean rating of 1.57 on a 5-point Likert scale. The t-value of 19.975 with an associated probability of <0.0001 indicates 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 staff extent of awareness and extent of adoption of UNESCO restoration practices.

Hypothesis 2:

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

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

Table 2: Two Sample t-test for Differences in the Means of university library staff extent of awareness (S-AW-RP) and extent of adoption (S-AD-RP) of UNESCO restoration practices

ITEMS	OBS	MEAN	STD DEV	t-value	Prob	DECISION
S-AW-RP	270	1.94	0.27	19.975	<0.0001	SIGNIFICANT
S-AD-RP	270	1.57	0.15			

Table 2. Shows that university library staff extent of awareness of UNESCO restoration practices (S-AW-RP) with a mean rating of 1.94 is higher than the staff extent of adoption (S-AD-RP) of the restoration practices with a mean rating of 1.57 on a 5-point Likert scale. The t-value of 19.975 with an associated probability of <0.0001 indicates 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 staff extent of awareness and extent of adoption of UNESCO restoration practices.

Recommendations

On the basis of the findings of this study the following recommendations are made:

1. Government should sponsor Library staff to workshops, seminars and conferences nationally and internationally on the UNESCO Conservation Guidelines for acquisition of better Knowledge needed in using the UNESCO Conservation Guidelines.
2. The university should provide an enabling environment to help the university library staff work effectively and use the UNESCO Conservation Guidelines in their preservation practices.
3. The University Library staff should visit other Institutions of higher learning that uses UNESCO Conservation Guidelines for better knowledge, improvement and greater productivity.

Reference

Aina, L.O.(2007).Library and Information Science Text for Africa.

Akporhonor, B.A.(2010). Library Funding in Nigeria: Past, Present and Future. The Boston Line.*Managing library finance, 18 (2):63.*

Akuezuilo, E.O. & Agu, N.N. (2015).*Research and Statistics in Education.* Awka: Nuel Centi Publishers.

Bonde,(2013) Preservation of records: code of practice for the mechanical cleaning of records. **:** Public Record Office of Northern Ireland.

Brock, (1997) Opinion server of users on mutilation and book theft in selected college libraries in Maiduguri, Borno state.

Brock, (2010) Avoiding technological quicksand: Finding a viable technical foundation for digital preservation. A report to the council on library and information resources. Washington: Council on library and Information resources Retrieved from.http://www.clor.org/pubs/reports/rothenberg/contents.htm.

Canadian Conservation Institute. (2002). Archived from the original *on 12 March 2014*. Retrieved 13 April 2014.*)*

Cornell University Library (2005).Digital preservation management: implementing short term strategies for long term problems. Retrieved from: http://www.icpsr.umich.edu/dpm/dpm-eng/tutorialprint.pdf

Crespo, C. and Vinas, V. (2011).The preservation and restoration of paper records and books. Retrieved fromhttp://cool.conservation-org/byauth/roggia/barrow/chap05.html

Edom, B. O. (2012). Principles of the use of the library. Owerri: Springfield publishers. ..IFLA-PAC China (2006). Strategic plan 2006-2008.Retrieved from:http://www.nlc.gov./cn/en/service/iflapacchinacenter/strategem.htm

Jordan K.S. (2003). Special collections and preservation: In *Encyclopedia of Library and information science*. Chicago, Illinois USA: Chicago Public Library.

Madu, E. C. and Adeniran**, T. N.** (2004). *Information Technology: Uses and Preservation of Resources in Libraries and Information Centres* (2nd ed.) Ibadan: Evi-Coleman Publications.

Meyer, A.(n.d). Rodents in museums, not only a gnawing problem!. In Proceedings of the 3rd Nordic Symposium on Insect Pest Control in Museums: Stockholm, September 24-25, 1998, 158-163.

Muhammed, U. N. (2006)... Preservation and conservation of library materials: The situation in the National library of Nigeria. *Nigerbiblios, 17*(1&2), 116-139. ISSN: 0331-0000.

Ngulube, P. (2003). *Preservation and access to public records and archives in Natal, Pietermanritzburg.*Retrieved from http://www.infs.ukzn.ac.za/thesispn.pdf.

North east Document Conservation Center Preservation Leaflets Disaster Assistance (2012)

Olatokun, W. M. (2008). A survey of preservation and conservation practices and http techniques in Nigerian university libraries. *Library and Information Science Research Electronic Journal, 18*(2). Retrieved from://libres.curtin.edu.aul.

Omede, R.A. (2004). Archival Preservation Practices at the National Archives Enugu. A masters Project Submitted to the Department of Library and Information Science, University of Nigeria Nsukka.

Reed-Scott, J. (2000). Planning for preservation in libraries. In: Banks, P.N., &Pilette, R. (Eds). *Preservation: Issues and planning*. Chicago: American Library Association, pp.82-96.

Shameend,L.K.(2011).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 Machel Veterinary Medicine Library.

Today Moore (2011) "Implementing Information Literacy in Higher Education: a Perspective on the roles of librarians and Disciplinary faculty. LIBRES Library and Information Science Research Electronic Journal Vol. 19, Issue 1, March.

Twain (2011) The future of the past: preservation in Amorval Research Libraries. Washington, D.C: Council of Library and Information Resources.

Ugwuanyi, R.C. (2000). Preservation of Traditional Library materials in Academic libraries in Enugu State. A masters Project Submitted to the Department of Library and information science, University of Nigeria, Nsukka.

UNESCO Conservation Guidelines (2000). Retrieved from http://www.unesco.org/webworld/ramp/html/r8904e/r8904e08.ht

United Kingdom Institute for Conservation of Historic and Artistic Works (UKIC, 2008).Preservation**.**