

## **Influence of preservation and conservation on the availability of information resources in Leads City University Library**

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### **Abstract**

Resource availability is the bedrock of an effective and functional university library. Libraries that lose its relevant resources to deterioration and technology change would struggle to maintain its relevance and library patronage. This behooves librarians to retard depreciation and deterioration of its resources by inculcating the rudiments of preservation and conservation of information materials into its practices. This study was carried out in Lead City University Library and the respondents were the librarians. There were thirteen (13) research and academic librarians in Lead City University Library, notwithstanding, ten (10) librarians where the actual respondents engaged in this study. Descriptive research design was employed for this study. Purposive sampling technique was adopted. All the departments in the library were covered. The research instrument employed for data collection is the questionnaire. Descriptive analysis was done using frequencies, percentages and mean scores. It was discovered from this study that preservation and conservation of information materials in Leads City University Library is effective. However, the discourse on challenges elucidated that Lead City University Library suffers from inadequate funding and a deficiency in both library committee structures and managerial initiatives. Such deficiencies pose significant impediments to the effective preservation and conservation of information resources within the university library. It is therefore recommended that the library should regularly deacidify its paper based materials in order to neutralize its acidity. Lead city university management should endeavour to increase the funds allocated to the library. The library should inaugurate a library committee or management initiative. Conclusively, given the critical role that preservation and conservation play in ensuring the continued availability of information resources, it is imperative for university libraries to prioritize and maintain these fundamental principles. By so doing, they can directly enhance the accessibility of information materials and uphold their mandate as vital educational and research institutions.

**Keywords:** Preservation, conservation, resources availability, information resources

### **Introduction**

A university library is a structure that provides information materials essential for teaching, learning and research. The university library is an indispensable organism within the institution. Its continuous existence is germane to the academic productivity and prowess of the institution in which it exists. The efforts of a university library will be thwarted if it is without adequate and relevant information materials. This would lead to drastic reduction in patronage and relevance of the library which is a treat that is detrimental to the very existence of the library. Hence it is of utmost importance that university libraries preserve and conserve their information materials in a bid to elongate

the lifespan of these materials. Preservation and conservation of information materials in university libraries helps to ensure that relevant information materials which are not yet obsolete are kept in good condition for as long as humanly possible, ensuring they don't deteriorate beyond a useful point true out the shelve life of the information material. It is of utmost importance that university libraries ensure that its information materials are preserved and conserved so as to elongate their life span and ensure the library materials do not go into extinction prematurely which would facilitate ease of access and availability of the library resources (Sheji 2018).

Ogunniyi, Akerele, Afolabi and Jato (2009) asserted that preservation and conservation are indispensable concepts in librarianship, based on the need to protect and secure all the abundant information resources in the library. These materials are expensive and so they must always be in good condition and well maintained. Preservation implies holding on to the original value or quality of an item to avoid deterioration. It is the act of maintaining a library material so it will remain in its original state for as long as possible and ensure that deterioration is forestalled or avoided. It is also the set of activities that are aimed at prolonging the life of a record and relevant meta data to enhance its value or improve access to it through proactive intervention/means thereby making the information materials readily available for the library patrons (Okhahu, 2021). Preservation refers to the act of preventing library materials (print/non-print) from being damaged. The cost implications of replacing library materials wearing out permanently is very high, hence these information materials has to be guarded jealously. Preservation makes good economic sense.

Sheji, (2018) averred that the whole essence of preserving information materials is to extend the use of life of the library materials. The elongation of life and usage of an information resource is possible through periodical inspection and consequently, early detection of any conditions which may constitute damage to the information resource. Ensuring the preservation of information resources through meticulous handling and appropriate utilization, practiced by both information professionals and users, is essential for maintaining the optimal physical state of such resources. It cannot be easily predicted what will be of interest to researchers in the future, hence, preserving of current collections is the best way to serve future users. Conservation is the treatment given to damaged or

deteriorated materials. It is the process of prolonging the shelf life of a library material through special methods to stop or slow down further deterioration. Conservation focuses on maintaining resources adequately and ensuring that its life span can be prolonged well into the future. Conservation is the operations intended to remedy deterioration of an information material (Ogunniyi et.al 2009).

Sheji, (2018) asserted that the essence of conservation is to ensure that the integrity and initial quality of the information materials is maintained. Information materials are saved from the ravages of time, threats of pollution and also from devastation brought about by both natural and man-made disasters. It also ensures prompt repairs of these materials. Information resources may get torn, defaced or mutilated over a period of time due to constant use. As such, it is of utmost importance to restore them to a satisfactory state or to their original condition in order to achieve improved physical appearance and availability of these library resources before they become outdated. Repairs of information resources constitute among others; binding, gluing, sewing etc. in the case of book resources and other measures depending on the peculiarity of damage and the type of information resource. Library materials are conserved for the benefit of present and future generation of users. These processes elongate the lifespan of the library materials which indirectly ensures the availability of information resources. Preservation of information materials helps to ensure that these materials do not go into extinction before the material becomes obsolete (Aliyu 2017).

Basically, the processes aimed at prolonging the lifespan of library materials play a crucial role in ensuring the availability of information resources and preventing valuable materials from becoming extinct or obsolete prematurely.

In order to ensure the availability and elongated life span of information materials, university libraries usually employ preservation and conservation methods to protect their collections. These methods can include proper storage conditions (temperature and humidity control), digitization of materials, restoration and repair of damaged items, and the use of archival-quality materials for binding and packaging. Libraries are repositories of knowledge, housing a wide range of materials, including books, manuscripts, journals, and other documents (Okhahu, 2021).

Conservation efforts aim to protect these materials from deterioration, damage, or loss, thereby preserving the knowledge contained within them. Preservation and conservation of information materials in university libraries facilitates availability and access to historical knowledge. Preserving information materials allows libraries to maintain access to historical knowledge, cultural heritage, and unique resources. This is especially important for rare manuscripts, historical documents, and other materials that may not be easily replaceable. Many libraries possess historical and rare materials that provide valuable insights into the past. Conservation ensures that these materials remain in usable condition, allowing researchers and scholars to access and study them (Aliyu 2017).

Ogunniyi, et.al (2009) opined that academic libraries serve as repositories of knowledge for researchers and scholars. By extending the lifespan of materials, university libraries guarantee the availability of such information material and also ensure that future generations of researchers have access to the same resources, promoting continuity in academic and scholarly pursuits. Library resources are essential for research, education, and lifelong learning. Well-preserved materials ensure that

researchers, students, and the general public have access to valuable information and educational materials. Libraries are committed to providing long-term access to their collections. Proper preservation and conservation practices help extend the lifespan of materials, reducing the need for frequent replacements and ensuring that resources remain available for years to come.

Sheji, (2018) averred that replacing lost or deteriorated materials can be costly. Preservation efforts can reduce the financial burden on university libraries by extending the usable life of their collections. Implementing efficient conservation methodologies has the potential to yield financial benefits for library institutions. Instead of constantly replacing or repairing damaged materials, libraries can invest in preventive measures and proper storage, which would ultimately reduce their financial burden. While preserving materials is important, it's also essential to monitor the relevance and accessibility of formats. Some materials may become obsolete due to changes in technology or information needs, necessitating format migration or adaptation which indirectly helps to ensure that the data or the actual information is still available. The preservation of information materials in libraries is a multifaceted endeavour that serves not only to extend the lifespan of materials but also to ensure the continued availability of valuable resources, contribute to research and scholarship, address economic and sustainability concerns. University libraries play a crucial role in safeguarding and providing access to its collective knowledge. The preservation and conservation of library resources is essential to ensure the continued accessibility and availability of these resources to library patrons and future generations (Okhahu, 2021).

### **Statement of the problem**

Preservation and conservation of information materials is an important practice in university libraries as it helps to retard depreciation and deterioration of information materials in the library thereby ensuring the availability, accessibility and usability of these library resources while they are still relevant. It is highly expedient for university libraries to adequately preserve and conserve its resources, otherwise the library would gradually lose its materials and this is detrimental to library patronage and the very existence of the library at large. However preservation and conservation of library resources does not come without its own challenges. This behoves the author to take a critical look at the challenges damaging the practice of preservation and conservation and the influence it has on availability of the library resources in university libraries.

### **Objectives of the study**

The main objective of this study is to investigate the challenges ravaging preservation and conservation of library resources and the influence this has on availability of information materials in Lead City University Library. The objectives are to;

1. explore the preservative and conservative measures employed to elongate the life span and protect the integrity of information materials in Lead City University Library, Ibadan;
2. ascertain the challenges militating against effective preservation and conservation of library resources in Lead City University Library, Ibadan; and
3. determine the influence of preservation and conservation on the availability of information resources in Lead City University Library, Ibadan.

### **Research questions**

The following research questions are answered in the study:

- i. What are the preservative and conservative measures employed to elongate the life span and protect the integrity of library resources in Lead City University Library, Ibadan?
- ii. What are the challenges militating against effective preservation and conservation of library resources in Lead City University Library, Ibadan?
- iii. What is the influence of preservation and conservation on the availability of information resources in Lead City University Library, Ibadan?

### **Literature review**

Preservation and conservation helps to elongate the life span and ensure the usability of library resources during its shelf life. It ensures that sufficient and adequate information materials are readily available for the library patrons. It equally ensures that relevant and current information materials are not retrieved from circulation during its active shelf life. Preservation and conservation is the act of minimizing or reducing the physical and chemical deterioration of information materials Osunride and Adetunla (2017). Rathnabahu (2023) averred that preservation encompasses all organizational and financial factors, storage facilities, staffing standards, policies, preservation methods and techniques related to the preservation of library resources and their content whereas conservation refers to the specific measures and policies used to protect library materials from decay and damage. It also includes the technical remedies and techniques used for conservation by technical staff.

Preserving and restoring information materials is essential to ensure the

longevity, accessibility and availability of valuable cultural, historical, and educational resources. Information professionals, including librarians, archivists, and conservators, have been advocating for and implementing various measures to achieve this goal. The administration and upkeep of information resources to facilitate restoration to its original state or a comparable approximation necessitate the implementation of diverse processes and methodologies tailored to the specific types and formats of information resource materials. (Aliyu, 2017). The challenges that militate against effective and efficient preservation and conservation in university libraries cannot be over emphasised. These nagging factors have been discussed since time immemorial. However the problem of deterioration and preservation of information materials is not a new phenomenon. It has existed since the invention of books and the founding of libraries. Aliyu (2017) opined that there is lack of technical expertise in university libraries so also, information professionals were not well informed about the preservation and repair of these materials however, a trained workforce is required for a successful programme. The library material can be conserved in different ways such as physical, chemical, photocopying/reprographic and digital conversation. Physical conservation entails mending, repairing, binding, cleaning and dusting, shelving library material for the free flow of air, lamination, installing air-conditioners and employing adequate security. Chemical conversation involves the use of insecticide to reinstate brittle and damaged book, fumigation to destroy eggs and larvae of insects and termites, encapsulation. Photocopying/reprographic is done through photocopying and microfilms. Digital conservation is used for non-book materials and it entails scanning and copying the details of digital

material into CDs and DVDs, replicating of old CD / hard disk or server backup.

Deterioration is a change of original state of any material by interaction between the object and the factors of destruction. The different types of deterioration of the paper based materials are reflected in wear and tear, shrinkage, cracks, brittleness, warping, bio infestation, discoloration, abrasion, hole, dust and dirt accumulation etc. Mani and Naresh (2017) asserted that library materials are susceptible to deterioration by the following factors:

- Environmental (climatic Factors) such as light, heat, humidity and moisture, dust and dirt, water.
- Biological factors: - Microorganisms, insects and rodents.
- Chemical factors
- Human factors
- Disasters

Tondo, Jembe and Yankyar (2022) opined that deterioration of information resources occurs in various forms which include brittleness of information resources, stickiness of coated paper based resources and dilution of inks which are caused by high relative humidity, physical breakdown of the information resources. Weaken adhesive and rooted leather are caused by heavy usage, sustained fungi and discoloration as well as theft, mutilation and vandalism. There is therefore, an urgent need for effective preservative and conservative measures to enhance survival and availability of the library resources. University libraries could avert factors of deterioration from ravaging its information materials. High temperature, relative humidity and long exposure of sunlight rays to library and archival materials accelerate deterioration of papers. It is important to ensure that library and archival materials are kept in such conditions that will slow down deterioration. Thus, library and archival materials must be housed in an air-

conditioned environment in Africa so that moderate temperature and relative humidity can be maintained. Maintenance of an adequate air-conditioning system in the library building would also slow down multiplication of biological agents amongst the library materials. It is suggested that books be kept at a temperature that is comfortable to man. Also, there is a need to have adequate ventilation for library resource materials; the circulating of air within the building containing the library material must be adequate. Books need to be enclosed in protective cases to eliminate heat, light and air pollutants. It may be necessary to regularly fumigate library materials, so that insects that damage books could be eliminated. This can be done during public holidays when the library is not open to users. There should be regular dusting of library materials as this would eradicate most of the microbiological organisms that accelerate deterioration. Also, regular inspection of collections should be encouraged as well as ensuring that books are not too tightly shelved as this will decrease circulation of air. Dusting and cleaning of shelves, books and the engagements of humans to secure information resources are the most recommended approaches used to secure library information resources (Mubofu, Mambo and Samzugui 2022).

Pandya and Gohil (2023) asserted that in most university libraries digitisation of rare materials, binding, de-acidification and pest control were common practices of restoration. Library and archival materials must be properly handled and stored. Materials should be provided with cover jackets and they should be stored on smooth shelves. Popular library materials must be purchased in multiple copies as this would reduce excessive demand if there are few copies of such materials. Photocopying of books should be minimized because excessive photocopying would lead to wear and tear

of books in the library after prolonged use. The worn out material could be sent for binding so that the cover could be strong. The library should also have a policy of managing disaster. Some disasters such as fire, flood and earthquake might occur at any time. It is therefore necessary for the library to have in place a policy that would mitigate the effects of a disaster. For example, in case of fire disaster there should be an abundance of fire extinguishers at appropriate places in the library and staff should be trained on how to handle them. It might also be necessary for a library to insure its holdings against such risks of fire, flood, earthquake and other disasters.

Reformatting is another method through which university libraries preserve their information materials. This involves copying activities such as photocopying, and digitization. Digitization refers to all the steps involved in the process transforming library collections in analogue format to digital format for the primary purpose of preservation and also to ensure its online visibility and accessibility. It is the process of converting analogue (paper) materials into computer compatible formats. A collection of library or archival materials converted to machine-readable format to provide electronic access or for preservation purposes are known as digitalized material. Some library books could become brittle because of paper used in producing such books. They break easily whenever they are handled. In such situation it may be necessary to preserve the intellectual content of such books to prevent total loss of the material (Olubiyo, Achebe, and Olubiyo 2022).

There are generally two methods of preserving such library materials. These are photocopying, and digitization. Books that might become brittle could be photocopied. However, digitization is a more recent development of preservation. It is the process of converting a text or

image from print medium or any other medium into a digital medium. It is preferred because of several advantages it has. This is because digital materials can easily be accessed, retrieved and transmitted. Materials, such as brittle paper, are inherently vulnerable to physical deterioration over time. Reformatting offers a means to rescue the content from these deteriorating materials, preventing the potential loss of valuable knowledge. Reformatting ensures long-term accessibility. Digitization and other reformatting methods ensure that the information remains accessible for an extended period. Unlike paper, which can decay and become illegible, digital and microfilm formats have proven to be more durable (Sheji, 2018).

Reformatting facilitates space efficiency in the sense that electronic storage and microfilm take up significantly less physical space compared to retaining original paper documents. This can free up valuable space within libraries for other purposes. In case there is a disaster, reformatting helps to ensure Disaster Recovery. Digital copies stored in multiple locations can serve as backups in case of disasters that might damage or destroy physical records. This adds a layer of security against unexpected events. It is Cost-Effective in the Long Run. While reformatting may involve initial expenses, it can be cost-effective in the long term. It reduces the need for extensive preservation and maintenance efforts for physical materials, which can be costly and resource-intensive. It is therefore sufficient to say that reformatting is a proactive and necessary approach for academic librarians to ensure the preservation, availability and accessibility of information materials. It addresses the challenges posed by materials like brittle paper. Although the process might have high cost implication, the long-term benefits in terms of preservation, efficiency, and compliance

makes it a valuable investment (Olubiyo, Achebe, and Olubiyo 2022).

Library holdings are not only paper-based materials, but also materials such as photographic, magnetic, sound recordings and digital materials which constitute a significant proportion of holdings of a library. These materials have to be preserved just like paper-based materials. This is because they might be damaged with prolonged use and a user might not be able to have access to the intellectual content of such materials. Digitization is used mainly in preservation photographs. The photograph is captured through the use of a digital camera or a scanner. For materials such as audio, video recordings, and compact discs, preservation is done by recopying the materials regularly so as to reduce the risk of the digital materials being corrupted or the magnetic materials being demagnetized. For sound recordings, reclamation is the preferred method of preservation. This is a method of obtaining satisfactory sound from a sound recording using electronic processes to remove unwanted noise from the sound (Sheji, 2018).

Olayode, Okhakhu, and Ogbe (2022) opined that resources availability is central to academic use of university library. Availability of information resources entails the provision and inclusion of the resources in the collection of the libraries at the disposal of users in university libraries. Both print and electronic information resources should be accessible to the users when they are available. The availability of information resources is an indispensable factor in acquiring knowledge, learning and research; hence every university library regardless of size should have adequate information resources available for its users for reading, learning and research, as it is inevitable for institutions of higher learning to succeed without libraries.

Mubofu, Mambo and Samzugri (2020) averred that preservation of

information resources is crucial and it incorporates part of library operations. Therefore, library staff should be empowered to apply their knowledge to secure and protect library information resources in a bid to ensure its availability and prolong its life span. Preservation and conservation of information materials has a direct impact on the availability of the library resources. Librarians therefore should note that information resources availability in the library alone cannot fulfil the objectives of the library if it deteriorates and is no longer useable. Preservation and conservation processes shouldn't compromise the integrity of the information material. In the same vein it is highly expedient for the library management to organize capacity building sections for the library professional that would be directly involved in the preservation and conservation exercises (Umoren and Okon 2020). Rachman and Ratnasari (2022) opined that it is of utmost importance to handle library collections with care and cautions and effect appropriate preservation and conservation measures in a bid to ensure that library collections remain durable. This has a direct influence on the availability and accessibility of information resources managed by the library.

Rathnabahu (2023) asserted that libraries preserve and conserve materials to ensure their availability for future generations. Ensuring the availability of information resources in university libraries is crucial to support research, learning, and scholarly activities. University libraries strive to maintain a diverse and comprehensive collection of information resources, in a bid to ensure it caters to the varied needs of students, faculty, and researchers in the institution. This collection has to be effectively preserved and conserved so as to inhibit retardation and depreciation of the information materials and ensure they have prolonged shelf life. Information materials

that are not yet obsolete might be taken off the shelf if it deteriorates to the point that it is no longer presentable. The ripple effect of this occurrence is that the information material will not be available for the library patrons which it serves. This serves as constrain to user satisfaction. A crucial way through which university libraries ensure availability of its resources is through preservation and conservation of information materials as this helps to keep library resources in circulation all through its shelf life and also to support the academic and research needs of the institution in which the library exist. Preservation and conservation of information materials is crucial to maintaining and enhancing the availability of these resources in a university library (Tondo, Jembe, and Yankyar 2022).

Makinde, Monu, Okusaga, Ekeh (2022) averred that preservation and conservation of library resources have a significant impact on the availability of information materials in university libraries. The primary function of a library is to collect, organize, preserve, conserve, and provide knowledge and information materials available to users. Therefore, the preservation of library materials is essential to ensure that the information resources are available for the library patrons or the faculty. Makinde, et.al (2022) asserted that deterioration of information materials is one of the major problems facing modern-day university libraries. The collection development in the library helps in conserving information resources. This reflects the library mission, which is to collect, organize, preserve, and conserve information materials. Policies in collection development should be given serious consideration in building library collections. Adequate funding for resources and maintaining good and up-to-date maintenance ethics are necessary for better preservation and conservation of the information resources.



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Rachman and Ratnasari (2022) asserted that preservation of library materials is a crucial undertaking that ensures the long-term survival and availability of valuable resources within a library's collection. Library resources are susceptible to corrosion and mutilation once it is exposed to use and passage of time. The four major factors of deterioration pose significant threats to the integrity and usability of library resources. Preservation and conservation measures in university libraries retard the deterioration process and also help restore these library resources to its original state. Preserving and conservation of library materials, facilitates safeguarding historical and cultural heritage, promote scholarly research, and most importantly ensure the knowledge and wisdom contained within these resources are available for future generations to explore and learn from. Umoren and Okon (2020) opined that preservation and conservation of library materials is of utmost importance due to its significant impact on the cultural, educational, historical realms and availability of information resources in university libraries. University libraries are irreplaceable repositories of knowledge, housing a vast range of materials that hold immense intellectual and cultural value. Preserving and conserving these materials facilitates their longevity and availability which is beneficial to present and future generations in various ways.

Makinde, et.al (2022) averred that preservation and conservation of library resources promotes availability and access to information, it ensures that library patrons have undeterred access to reliable and authoritative information. The availability of these library resources empowers students, researchers, and lifelong learners, enabling them to expand their knowledge, pursue academic endeavours, and contribute to society's intellectual progress. Preservation and conservation of information resources in

university libraries ensures the availability of resources such as original manuscripts, rare books, archival documents, primary sources of historical events, literary works, scientific breakthroughs, and societal changes which serves as the bases upon which future research is built. The influence of preservation and conservation has an economic advantage as it helps to ensure that library resources are kept in circulation for as long as possible which eliminates the need for constant replacement of expensive information resources.

The conservation of library resources is essential to ensure the continued availability and accessibility of these resources to library patrons and future generations. Preservation and conservation of library resources comes with various challenges. For instance budget constraints is a major impediment to preservation and conservation in university libraries in the sense that many university libraries operate with limited budgets, making it challenging to allocate sufficient resources for preservation and conservation efforts. This includes funding for specialized staff, equipment, and materials required for preservation. Staff expertise is germane to effective preservation and conservation in university libraries. Conservation and preservation is a specialized field that requires staff that understands the chemical nature of the materials in their custody. Preservation and conservation often require specialized knowledge and skills. University libraries sometimes struggle to recruit, train and retain staff with the necessary expertise, leading to difficulties in effectively preserving and conserving the library resources materials (Osunride and Adetunla 2017).

University libraries must contend with the rapid evolution of information formats and technologies. Materials in obsolete formats may be challenging to preserve or migrate to more current

formats. Aging Collections or older materials, such as rare books and manuscripts, are susceptible to deterioration over time. Server environmental conditions are detrimental to the effective preservation and elongation of life span of the library resources. University libraries need to provide enabling environment suitable for the sustainability of the library materials. University libraries often house historical collections that require ongoing care and attention to prevent degradation (Pandya and Gohil 2023).

Madumere (2022) opined that university libraries need to maintain suitable environmental conditions including temperature and humidity control to prevent damage to the library resources. Maintaining these conditions can be costly and may be challenging in older library buildings. As more academic materials become digitized, libraries face the challenge of ensuring the long-term preservation and access to digital resources. This involves addressing issues like file format obsolescence, data migration, and digital rights management. University libraries often struggle with limited storage space. Finding adequate space to store both physical and digital collections while ensuring proper preservation conditions can be a significant challenge. There can be tension between collection development (acquiring new materials) and preservation efforts. Limited resources may lead to difficult decisions about where to allocate funding and resources. Collaboration with other institutions, preservation experts, and consortia can enhance preservation efforts. However, coordinating such collaborations can be challenging due to administrative and logistical complexities. Users expect easy and immediate access to materials, which can create pressure to prioritize access over preservation. Balancing user needs with preservation requirements can be a delicate task.

Singha and Halder (2022) averred that there must be a written policy in the libraries and sufficient fund must be provided to facilitate ease of operation. It is highly expedient for university libraries to have emergency preparedness measures in place. University libraries need to have plans in place for disaster recovery and emergency response to protect their collections from events like fires, floods, and natural disasters. Copyright and intellectual property rights can present challenges in preserving and providing access to certain materials, especially in the digital realm. Addressing these challenges requires a strategic approach, collaboration with preservation organizations, ongoing training and development of staff, and a commitment to balancing preservation needs with user access and collection development goals. Unsuitable structures make information materials susceptible to deterioration and depreciation.

Inappropriate construction is a typical issue for university libraries. Unconducive buildings does not provide enabling environment that can elongate the life span of information materials in university libraries. Many libraries transformed buildings into storage spaces for their holdings. Informational materials stored in such locations will not be adequately guarded against theft, humidity, light, insects, degradation, and complete loss of the information material (Ogunniyi, et.al 2009).

Madumere (2022) opined that lack of maintenance policy is another challenge to many archives of university libraries stating that most Nigerian libraries and archives do not have policy documents and maintenance librarians. Madumere (2022) further stated that policy document is a foundation for any meaningful maintenance practices in archives. Policy documents interpret in clear terms what should be done and how to go about it in relation to the maintenance of archives of

university libraries. Unavailability of necessary ICT facilities is also a major impediment that could truncate preservation and conservation of library materials thereby limiting the availability of information materials in university libraries. In some instances when the library management lacks initiative or a committee set up particularly for the purpose of preservation and conservation of information materials in the library, the procedures and implementation might not be operational. In the same vein a university library that has no written policy on preservation and conservation of its library resources could find the process challenging and unproductive which is detrimental to the availability and accessibility of information materials in the university library.

Okhahu, (2021) asserted that the Nigerian economy is presently not favourable for university libraries as the government would prefer to invest in other sectors of the economy, rather than to invest in university libraries to help improve on the availability and accessibility of information materials. It would therefore be challenging for university libraries to effectively ensure the rudiments of preservation and conservation is maintained. Inadequate resources are issues that thwart efforts in preserving and conserving information materials in university libraries. Preservation and conservation of library resources is often exacerbated by inadequate or non-existent equipment, materials, and financial resources. A disaster management plan is an important tool in any organization. The absence of such a plan implies that in the event of a disaster occurring, an information centre would not be in a position to respond to the disaster with the urgency that is required. Libraries are prone to disasters that can be classified broadly as natural and manmade and they include fire, flooding, vandalism, civil unrest,

earthquakes, volcanic eruptions, war, lightening and to some extent rodents and pests (Sheji, 2018). It is of utmost importance that university libraries put machinery in motion through disaster management plans and emergency response measures so as to mitigate the effect of these inevitable occurrences and to ensure that its effects is not so detrimental to the library and its resources.

### Methods

The study population comprises of research and academic librarians from Lead City University Library. The researcher adopted the descriptive research design in this study. There are thirteen (13) research and academic librarians in Lead City University Library and ten (10) of them were the actual respondents for this study. Purposive sampling technique was adopted. All the departments in the library were covered. The study area was chosen by the researcher to validate research findings on influence of preservation and conservation on the availability of information resources and its inevitable challenges. The research instrument employed for data collection is the questionnaire, which was designed by the researcher. The researcher employed research assistants to help administer the questionnaires to the respondents. The questionnaires were collected on the spot. Descriptive analysis was done using frequencies, percentages and mean scores. Table 1 depicts the different demographic characteristics of the respondents. From the table above it is evident that the age of 30% of respondents was between the ranges of 30 – 35 while the age of 10% of the respondents was between the ranges of 36 – 40 in the same vein, the age of 20% of the respondents was between the ranges of 46 – 50. 60% of the respondents were male while 40% of the respondents were female. In this study 70% of the respondents were married while 30% of the respondents were single. A total 60%

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of the respondents had worked between the ranges of 5 – 10 years.

**Table 1: Demographic variables of the respondents**

Variables	Items	Frequency	Percentage (%)
Sex	Male	6	60
	Female	4	40
Age	30 - 35	3	30
	36 - 40	1	10
	41 – 45	3	30
	46 - 50	2	20
	51 - 55	1	10
Marital status	Single	3	30
	Married	7	70
	Divorced	-	-
	Widowed	-	-
Work experience	Below 5	1	10
	5 -10	6	60
	11 - 15	1	10
	16 -20	1	10
	21 - 25	1	10

N=10

**Table 2: Preservation and conservation measures of information materials in Leads City University Library**

Preservation and conservation measures	SA(4)	A(3)	D(2)	SD(1)	Mean x	Decision rule
Reformatting's the library holdings is a regular occurrence in this library.	2	3	5	-	2.7	Agreed
Deacidification is often done for paper based materials to neutralize the acidity.	1	2	7	-	2.4	Disagreed
Methods of physical conservation in Lead City University Library include: Mending, repairing and binding, cleaning and dusting, shelving library material for the free flow of air, lamination, installing air-conditioners, adequate security.	6	3	1	-	3.5	Agreed
Methods of Chemical Conservation: in Lead City University Library include: The use of insecticide to reinstate brittle and damaged books, fumigation to destroy eggs and larvae of insects and termites encapsulation.	6	3	1	-	3.5	Agreed
Methods of Digital conservation in Lead City University Library include: Scanning and coping in CD and DVD, replicating of old CD / hard disk or server backup, photocopying / reprographic through photocopying and microfilms.	4	5	1	-	3.3	Agreed

Key: SA=4, A=3, D = 2, SD=1

Decision rule: 0.00 – 2.49 = Disagreed 2.50 – 4.00 = Agreed

From the Table 2, it is evident that methods of physical conservation in Lead City University Library include: mending, repairing and binding, cleaning and dusting, shelving library material for the free flow of air, lamination, installing air-conditioners, adequate security ( $x = 3.5$ ). In the same vein, it is obvious that the methods of chemical conservation; in Lead City University Library include the use of insecticide to reinstate brittle and damaged books, fumigation to destroy eggs and larvae of insects and termites

encapsulation ( $x = 3.5$ ). Conversely, the table revealed that the respondents disagreed that deacidification is often done for paper based materials to neutralize the acidity ( $x = 2.4$ ). Meanwhile, based on the value of the weighted average of 2.50 out of 4.00 maximum values obtainable, which fall within the decision value for Agreed, it can be inferred that preservation and conservation of information materials in Leads City University Library is vastly effective.

**Table 3: Challenges Inhibiting Preservation and Conservation of Information Materials in Leads City University Library**

Challenges	SA(4)	A(3)	D(2)	SD(1)	Mean x	Decision Rule
Inappropriate Building	-	-	9	1	1.9	Disagreed
Lack of disaster control plan	-	-	9	1	1.9	Disagreed
Lack of documented preservation and conservation policy	2	1	6	1	2.4	Disagreed
Inadequate Resources	-	2	7	1	2.1	Disagreed
Inadequate funding	2	5	2	1	2.8	Agreed
Inadequate ICT infrastructure	2	1	6	1	2.4	Disagreed
Lack of library committee or management initiative	2	2	5	1	2.5	Agreed
Lack of technical expertise	-	-	8	2	1.8	Disagreed
Lack of manpower and capacity building for staff	-	2	6	2	2.0	Disagreed
Unfavourable environment	1	-	6	3	1.9	Disagreed
Information materials housed in this library do not receive adequate protection against decay and destruction through humidity, light, insects, fire and water outbreaks.	1	-	7	2	2.0	Disagreed
Our library resources are exposed to theft deliberate mutilation of information materials by library patrons, loss and theft.	1	2	2	5	1.9	Disagreed

From Table 4, it is evident that the respondent agreed that preservation and conservation helps to elongate the life span and ensure the usability of library resources during its shelf life in Lead City University Library ( $x=3.8$ ). In the same vein the respondents also agreed that preservation and conservation ensures that sufficient and adequate information materials are readily available for the library patrons in Lead City University Library ( $x=3.7$ ). The respondents equally agreed that preservation and conservation

of library collections that are out of print increases the depth of the collection and improve access to a vast array of subjects in Lead City University Library ( $x = 3.5$ ). Meanwhile, based on the value of the weighted average of 2.50 out of 4.00 maximum values obtainable, which fall within the decision value for Agreed, it can therefore be inferred that the preservation and conservation of library resources has direct influence on availability of information materials in Leads City University Library.

### **Discussion**

It was discovered from this study that preservation and conservation of information materials in Leads City University Library is vastly effective. This is in consonance with Okhahu, (2021) assertion that university libraries play a crucial role in safeguarding and providing access to its collective knowledge. The preservation and conservation of library resources is essential to ensure the continued accessibility and availability of these resources to library patrons and future generations. In the same vein, this study is also in consonance with Aliyu (2017) assertion that conservation efforts aim to protect these materials from deterioration, damage, or loss, thereby preserving the knowledge contained within them. Preservation and conservation of information materials in university libraries facilitates availability and access to historical knowledge. Preserving information materials allows libraries to maintain access to historical knowledge, cultural heritage, and unique resources. This is especially important for rare manuscripts, historical documents, and other materials that may not be easily replaceable. Many libraries possess historical and rare materials that provide valuable insights into the past. Conservation ensures that these materials remain in usable condition, allowing researchers and scholars to access and study them.

It was discovered from this study that the challenges discussed inhibits preservation and conservation of information materials in Leads City University Library. This is in consonance with the assertions of Ogunniyi, et.al (2009) that inappropriate construction is a typical issue for university libraries. Unconducive buildings does not provide enabling environment that can elongate the life span of information materials in university libraries. Many libraries transformed

buildings into storage spaces for their holdings. Informational materials stored in such locations will not be adequately guarded against theft, humidity, light, insects, degradation, and complete loss of the information material.

It was discovered from this study that preservation and conservation of library resources has direct positive influence on availability of information materials in Leads City University Library. This is in consonance with the assertion of Rachman and Ratnasari (2022) who stated that it is of utmost importance to handle library collections with care and cautions and effect appropriate preservation and conservation measures in a bid to ensure that library collections remain durable which has a direct influence on the availability and accessibility of information resources managed by the library. In the same vein this discovery is also correlates with the assertions of Tondo, Jembe, and Yankyar (2022) which states that a crucial way through which university libraries ensure availability of its resources is trough preservation and conservation of information materials as this helps to keep library resources in circulation all through its shelve life and also to support the academic and research needs of the institution in which the library exist. Preservation and conservation of information materials is key to maintaining and enhancing the availability of these resources in an university library. Also Makinde, Monu, Okusaga, Ekeh (2022) averred that preservation and conservation of library resources have a significant impact on the availability of information materials in university libraries. The primary function of a library is to collect, organize, preserve, conserve, and provide knowledge and information materials available to users. Therefore, the preservation of library materials is essential to ensure that the information resources are available for the library patrons or the faculty.

### Conclusion

The study conducted at Lead City University revealed several key findings regarding the preservation and conservation practices within its library system. Notably, it was observed that the library does not regularly deacidify its paper-based materials. This deficiency is exacerbated by the institution's financial constraints, which pose significant challenges to its operational capacities. Furthermore, the absence of a dedicated library committee or proactive management initiatives underscores systemic shortcomings in the administration of the library's resources.

However, despite these challenges, the importance of preservation and conservation cannot be overstated. Effective preservation and conservation efforts serve to prolong the lifespan and enhance the usability of library resources throughout their shelf life. Indeed, within Lead City University Library, preservation and conservation measures are shown to be notably effective. These practices directly contribute to the availability and accessibility of information materials, thereby promoting the overall mission of the library as a hub of knowledge dissemination. Given the critical role that preservation and conservation play in ensuring the continued availability of information resources, it is imperative for university libraries to prioritize and maintain these fundamental principles. By so doing, they can directly enhance the accessibility of information materials and uphold their mandate as vital educational and research institutions.

Based on the findings of this study, the following recommendations are made for improvement;

1. The library should regularly deacidify its paper based materials in order to neutralize its acidity.

2. Lead city university management should endeavour to increase the funds allocated to the library.
3. The library should inaugurate a library committee or management initiative.
4. There is a need for improvements on the measures utilized for the preservation and conservation of library materials.
5. It is imperative to ensure that the impact of preservation and conservation efforts on the availability of information materials remains favourable.

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