

**LIBRARIANS INFORMATION COMMUNICATION TECHNOLOGY SKILLS AS  
CORRELATE OF PRESERVATION AND CONSERVATION OF INFORMATION  
RESOURCES IN UNIVERSITY LIBRARIES IN DELTA AND EDO STATE**

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**Abstract**

The study examined the correlation between librarians' Information Communication Technology (ICT) skills and the preservation and conservation of information resources in university libraries across Delta and Edo States, Nigeria. Employing a correlational survey design, data were collected from 183 librarians using questionnaires and analyzed through descriptive and inferential statistics. Results revealed a high level of preservation and conservation of library resources in the university libraries, alongside a similarly high level of ICT skills among librarians. Furthermore, a significant relationship was established between librarians' ICT skills and the preservation and conservation efforts. While ICT facilitates preservation and conservation processes, it was noted that librarians must possess adequate ICT skills to effectively utilize electronic resources for this purpose. The study concluded that preservation and conservation efforts in these libraries are commendable, and changes in librarians' ICT skills could impact preservation outcomes. Recommendations include intensifying efforts to preserve and conserve library resources to meet user needs effectively.

**Keywords:** Librarians, ICT, ICT Skills, Preservation, Conservation, Information Resources, University Libraries, Edo, Delta.

## **Introduction**

Libraries as vital social institutions, carry the responsibility of eliminating prejudice in disseminating information to the public. Their role encompasses the selection, acquisition, organization, diffusion, preservation, and assessment of information resources, both in print and non-print formats. Oluwaniyi (2015) defines library collections as information-bearing materials, divided into print and non-print categories. Academic libraries, serving as the heart of educational institutions, focus on acquiring, organizing, preserving, and making available diverse information resources to meet the needs of users, including researchers, lecturers, and students. Preservation and conservation are critical functions in academic libraries, ensuring the longevity of library collections. Murphy (2018) describes preservation as efforts to conserve and extend the lifespan of various materials, involving activities such as cleaning, mending, stabilizing, and managing environmental factors. Meanwhile, Somerville (2017) describes conservation as safeguarding and preserving the physical state of library collections, encompassing tasks like cleaning, mending, binding, rehousing, and documentation. Both preservation and conservation are essential for effective service delivery, requiring continuous maintenance to keep resources in optimal condition.

Preservation involves direct and indirect actions to protect materials from deterioration, considering aspects like housing, storage systems, and security against theft or improper treatment. Preservation services as outlined by Prajapati (2015), encompass evaluations, treatments, housing, storage reviews, surveys, and collection stabilization. It involves managing various factors such as storage, accommodations, personnel, policies, strategies, and methodologies. According to Oluwaniyi (2015), preservation helps to avoid degradation and ensure the physical well-being of information resources, which makes it a global problem for librarians. Preservation and conservation often used interchangeably, have subtle distinctions.

Murphy (2018) highlights that conservation entails resource management, whereas preservation entails avoiding damage to natural resources. In the context of library science, preservation refers to maintaining materials without alteration, whereas conservation involves curative treatments for damaged materials. Conservation, a direct method, physically or chemically alters items, while preservation includes preventive measures and processes (Murphy, 2018).

In the 21<sup>st</sup> century, librarians, face some challenges in preservation. As the collections of libraries expand to include modern formats like sound tapes and electronic information resources, librarians must adapt preservation efforts to new challenges. Hence, 21st-century

librarians must possess ICT skills to actively participate in preservation practices in the era of ICT. Information and communication technology (ICT) plays a crucial role in the maintenance and protection of library resources. Librarians need ICT skills for effective preservation in the digital age. The evolution of libraries from simple information preservation to providing access and dissemination has been facilitated by ICT. The transition of librarians from bookkeepers to information professionals is highlighted by Itsekor and Ugwunna (2014), who also stress the significance of ICT in library and information science. It is worthy of note that academic libraries, as repositories of knowledge, have a multifaceted role in acquiring, organizing, preserving, and disseminating information resources. Preservation and conservation are integral to their functions, ensuring the longevity of library collections. The evolving role of libraries in the digital age necessitates librarians to acquire ICT skills for effective preservation. As custodians of cultural and intellectual heritage, librarians play a crucial role in maintaining and promoting the accessibility of information resources for current and future generations. It is against this background that this study seeks to examine librarians' ICT skills as a correlate of the preservation and conservation of information resources in university libraries in Edo and Delta State.

### **Statement of the Problem**

Despite the significant importance of the preservation and conservation of library resources to ensure their longevity and durability, there is a noticeable decline in preservation and conservation practices in academic libraries, including university libraries resulting in the sudden disappearance of valuable resources due to wear and tear or destruction caused by factors like moisture and natural disasters. This scenario is the same for university libraries in Delta and Edo States, Nigeria. It has been observed that despite the increasing integration of information communication technology (ICT) in library operations, there is still no evidential satisfactory report of digital preservation and conservation of information resources in university libraries in Nigeria.

Furthermore, preliminary investigations suggest that librarians may not be inclined toward the preservation and conservation of resources, particularly with the growing use of technology for these purposes. This observation has raised concerns in the mind of the researcher. Could it be that librarians in university libraries, Delta and Edo States inclusive lack the necessary ICT skills required for effective engagement in the preservation and conservation of library resources in the 21st century? Could it also be that university libraries in Nigeria, Delta, and Edo State especially lack the necessary equipment required to engage

in digital preservation and conservation of information resources? An attempt to provide answers to the aforementioned study prompted this question.

The main objective of this study was to examine librarians' information communication technology (ICT) skills as a correlate of the preservation and conservation of information resources in university libraries in Delta and Edo State.

### **Research Questions**

The study answered the following research questions.

1. What are the types of information resources available for preservation and conservation in university libraries in Delta and Edo States?
2. What are the different methods used for the preservation and conservation of library resources in universities in Delta and Edo States?
3. What is the extent of preservation and conservation of library resources in university libraries in Edo and Delta State?
4. What is the extent of ICT skills possessed by librarians for the preservation and conservation of library resources?

### **Hypothesis**

This study tested one hypothesis at 0.05 level of significance.

1. There is no significant relationship between librarians' ICT skills and the preservation and conservation of library resources

### **Review of Related Literature**

The literature that was reviewed in this study was done in line with the research questions guiding the study.

#### **The Types of Information Resources Available for Preservation and Conservation in University Libraries**

In the realm of academic endeavours, the availability and preservation of information resources within university libraries play a pivotal role for both students and faculty members. The preservation and protection of library resources are of paramount concerns for university libraries, given their role as repositories of knowledge (Resources for Preservation and Protection, n.d.). Among the various information resources, printed books stand out as a prevalent and significant focus for preservation and conservation efforts in university libraries, according to Chun (2017). University libraries often house extensive collections of books in diverse formats, including hardback, paperback, and digital versions. According to Koehler (2017), printed books should be preserved since they are an essential source of knowledge and should be preserved for as long as possible. Beyond printed books, university

libraries offer a broad spectrum of information resources, including manuscripts, which hold cultural or historical significance. Manuscripts come in various forms, spanning ancient literature to contemporary works, and are valuable tools for study and instruction. Numerous studies have explored the availability and types of information resources in university libraries, shedding light on preservation practices and challenges. Tondo et al. (2022) conducted a study on the conservation and preservation of information resources in Francis Idachaba Library at Joseph Sarwua Tarka University Makurdi, Nigeria. Using a descriptive research design, the study aimed to identify the types of information resources preserved in the library. The findings revealed that books of various kinds were the most preserved resources, followed by reference materials, serials, and electronic resources, while vertical file materials received the least protection. This study establishes a connection with the current discourse, highlighting the predominant preservation focus on various types of books.

Similarly, Muhammed et al. (2020) delved into the management of information resources and services at the Kaduna State University Library. The study identified a range of information resources available, including books, periodicals, theses/dissertations/UG projects, audiovisual materials, journals, government publications, newspapers/magazines, and e-resources (subscribed and free databases). This underscores the diverse nature of collections within university libraries and the need for comprehensive preservation efforts. These studies collectively highlight the importance of preserving diverse information resources in university libraries, with a particular focus on printed books. The challenges and practices identified in these studies underscore the need for continuous efforts in the preservation and conservation of valuable resources to cater for the evolving needs of academic communities.

### **The Methods Used for Preservation and Conservation of Library Resources in University Libraries**

The preservation and conservation of information resources in university libraries involve a range of measures crucial for maintaining and safeguarding valuable materials such as books, journals, documents, and more. These measures encompass environmental controls, protective enclosures, digital preservation, conservation treatment, and disaster preparedness. The effectiveness of these procedures is vital for ensuring the availability and durability of resources, making ongoing investments and staying abreast of the latest technologies imperative for university libraries. Okpidi-Urhibo and Saibaukumo (2020) conducted a study focusing on selected law libraries in Nigeria to explore preservation and conservation techniques in special libraries. Their findings highlighted that cleaning and dusting were the

most commonly used methods due to their accessibility and simplicity, followed by appropriate shelving and physical security checks. Other methods included bindery, cold storage, burglary prevention, while procedures like boxing, encapsulation, access control, CCTV monitoring, de-acidification, and pH testing were less frequently employed. This study highlights the frequency of dusting and cleaning in preservation procedures, drawing a link with the continuing research.

In a related study, Tondo et al. (2022) investigated the conservation and preservation practices at the Francis Idachaba Library in Joseph Sarwuan Tarka University Makurdi, Nigeria. The research employed a descriptive survey approach, with 150 library staff members as the study population. The methods employed by the library for preserving information resources included binding, photocopying, lamination, reformatting, microfilming, cleaning and dusting, air condition installation, digital imaging, insecticide use, shelving for proper airflow, and ensuring adequate security. This study reinforces the idea that various methods are employed in libraries for preservation and conservation.

A comparable study by Timothy et al. (2017) focused on the preservation and conservation of library resources in the Bingham University Library in Karu, Nasarawa State, Nigeria. The survey research design included 25 library staff members, revealing that cleaning and dusting were the most frequently used methods, followed by fumigation, binding, photocopying, lamination, digitization, and jacketing. The study indicated that cleaning and dusting were the predominant practices for preservation and conservation. These studies collectively emphasize the diverse methods employed by university libraries to preserve and conserve information resources. Cleaning and dusting emerge as commonly used techniques across different library settings. The ongoing research aligns with these findings, contributing to the understanding of prevalent practices and highlighting the importance of various preservation methods in university libraries.

### **Extent of preservation and conservation of library resources in Universities in Edo and Delta States**

The preservation of print information resources is of the utmost importance since individuals are more comfortable with information sources that are located on paper. According to Zintah et al. (2017), printed information resources are far more prevalent in the academic world than digital information resources. It was determined by Anyaoku et al. (2019) that printed information resources are subject to degradation as a result of the acids that are contained in the paper. These acids cause damage to the fibers of the paper, which ultimately results in the paper being brittle and dis-coloured during its lifetime. Therefore, it

is unavoidable for libraries to preserve them through a variety of ways for future use; otherwise, they will be unable to pass on the knowledge that can be found in printed information resources to subsequent generations.

While commenting on the extent of the preservation and conservation of resources in university libraries, Bashorun et al. (2021) did a study on the survey of the preservation and conservation of information resources in Private University Libraries in South West, Nigeria. The purpose of this study was to provide a commentary on the extent to which university libraries preserve and conserve information resources. An approach known as descriptive survey design was chosen for the research project. For this study, the population of interest comprised all of the professionals and paraprofessionals operating inside the eight (8) private institutions that were chosen in the southwestern region of Nigeria. Out of the thirty-six institutions located in the South-west region, deliberate selection was made to include eight (8) private universities. To collect data for the study, a questionnaire was utilized. To analyze the data that was gathered, descriptive analysis was utilized, and frequency table counts and percentages were utilized. According to the findings, the degree of utilization of digital preservation is low, and it is not widely employed in some private university libraries. Some of these libraries did not even use it at all in their digital preservation efforts. Although this study is somewhat distinct from the one that is now being conducted in terms of its research approach and population size, it is comparable in that it demonstrates that the degree of digital preservation is rather low.

Furthermore, Okpidi-Urhibo and Saibakumo (2020) researched the preservation and protection of information resources in special libraries. The results of this study were presented in the form of a glimpse into chosen law libraries in Nigeria. For the study, the survey design was utilized; census sampling was incorporated, and a questionnaire was produced and distributed to 113 respondents (with a return rate of 93%), who were picked from a selection of institutions. The findings of the survey showed that there was a relatively low adoption of the majority of preservation procedures, except dusting and cleaning, correct shelving of books, and physical security. Even though there is a dearth of practically applicable policies, inadequate funding, and inadequate electrical supply, digital preservation has not yet been investigated. There is a connection between this study and the current study since it demonstrates that the majority of preservation procedures are not utilized.

**The ICT skills possessed by librarians for the preservation and conservation of library resources in university libraries in Edo and Delta States**

In the rapidly evolving 21st-century landscape dominated by information and communication technology (ICT), the role of libraries has transformed significantly. Onuoha and Obialor (2015) emphasize that we are currently in an era where information and knowledge, often invisible to the naked eye, serve as prime movers guiding various sectors. Libraries, empowered by advancements in ICT, now leverage diverse technologies to enhance their services. Proficient librarians, well-versed in ICT, play a pivotal role in administering electronic databases and managing the preservation of physical items through relevant technologies and software associated with ICT. Acknowledging the pivotal role of ICT skills, Akintonde and Awujoola (2022) highlight the essential competencies for library workers in the modern ICT-driven world. These include proficiency in word processing, spreadsheets, PowerPoint presentations, database management, file folders, email, internet usage, hardware and software understanding, web design, administration, mobile technology, and social media skills. Possessing these skills is deemed crucial for effectively managing and operating libraries in the contemporary era.

To explore the intersection of ICT skills and digital preservation practices, Akintonde and Awujoola (2022) conducted a research study in university libraries across the Southwest region of Nigeria. Using a descriptive survey research design, the study encompassed 262 library staff members from nine university libraries. Findings revealed that participants demonstrated competence in various ICT areas, including word processing, printing, database development and updating, resolving technical issues, and utilizing internet resources. A notable majority showed proficiency in web page design, indicating a comprehensive grasp of contemporary ICT tools. Moreover, the study discovered that library staff members exhibited competence in computing applications such as microfilming skills, digitization techniques, and encapsulation skills. The majority demonstrated the ability to duplicate documents for safety, convert hard copies to electronic formats, and construct original programmes for accessing digital items on future computer systems. Overall, the study concluded that the degree of ICT skills possessed by library staff in Southwest Nigerian universities is quite high and that there is a substantial association between information and communication technology (ICT) abilities and digital preservation practices in nine university libraries located in the south-western region of Nigeria, this conclusion is in agreement with their findings.

In a related study, David and Soyemi (2021) delved into the realm of information and communication technology (ICT) competence and digital preservation practices among library personnel in selected Nigerian private universities. Their findings revealed a high

level of ICT competence among library personnel, with proficiency spanning basic, intermediate, and moderate levels of advanced ICT skills. This study aligns with the research conducted by Akintonde and Awujoola, reinforcing the notion that library staff generally exhibit a high degree of ICT competency. Both findings essentially highlight the importance of ICT proficiency among library staff members and highlight their critical role in digital preservation procedures. As we navigate the information age, the high competence levels demonstrated by library staff in these studies contribute to the resilience and adaptability of libraries in preserving and managing valuable information resources.

### Research Method

The correlational research design was chosen for this study. The population of the study was one hundred and eighty-three (183) librarians working in university libraries in Edo and Delta State. This constitutes the total number of librarians working in all the university libraries across Delta and Edo State, Nigeria. The entire population of the study was sampled using the total enumeration sample technique because of the small and manageable size of the population. The instrument used to elicit data for this study was a structured questionnaire. The data collected were analyzed using both descriptive and inferential statistics and the criterion mean was placed at 2.50. while inferential statistics such as Pearson’s Product Moment Correlation was used to test the hypothesis at a 0.05 level of significance.

### Findings

**Research Question 1:** What are the types of information resources available for preservation and conservation in university libraries in Delta and Edo States?

Data in Table 1 provides the answer to this question.

**Table 1: Types of Information Resources Available for Preservation and Conservation in University Libraries**

Types of Information Resources	Agree		Disagree	
	No.	%	No.	%
Books	172	94.0	11	6.0
Journals	164	89.6	19	10.4
Newspapers	171	93.4	12	6.6
Magazines	172	94.0	11	6.0
Manuscripts	163	89.1	20	10.9
Audio-visual materials	165	90.2	18	9.8
Reports	97	53.0	86	47.0

Government Publications	113	61.7	70	38.3
Maps	100	54.6	83	45.4
Atlases	93	50.8	90	49.2

From Table 1, it was seen that books and magazines 172(94%) respectively, newspapers 171(93.4%), audio-visual materials 165(90.2%), journals 164(89.6%), manuscripts 163(89.1%), government publications 113(61.7%), maps 100(54.6%), reports 97(53%) and atlases 93(50.8%) are available. It can be concluded that the types of information resources available for preservation and conservation in university libraries in Delta and Edo States are books, magazines, newspapers, audio-visual materials, journals, manuscripts, government publications, maps, reports, and atlases.

**Research Question 2:** What are the different methods used for the preservation and conservation of library resources in universities in Delta and Edo States?

Data in Table 2: provides the answer to this question.

**Table 2: Methods Used for the Preservation and Conservation of Library Resources**

Methods for Preservation and Conservation of Information Resources	Agree		Disagree	
	No.	%	No.	%
Environmental Controls	172	94.0	11	6.0
Protective Enclosures	159	86.9	24	13.1
Binding and Rebinding	153	83.6	30	16.4
Digital Preservation	164	89.6	19	10.4
Disaster Preparedness	144	78.7	39	21.3
Conservation Treatment	176	96.2	7	3.8
Archival Preservation	133	72.7	50	27.3
Pest Management/Control	118	64.5	65	35.5
Cleaning and Repair	180	98.4	3	1.6
Monitoring	112	61.2	71	38.8
Microfilming	93	50.8	90	49.2

Table 2 show the different methods used for the preservation and conservation of library resources in universities. The respondents agreed on cleaning and repair 180(98.4%), conservation treatment 176(96.2%), environmental controls 172(94%), digital preservation

164(89.6%), protective enclosures 159(86.9%), binding and rebinding 153(83.6%), disaster preparedness 144(78.7%), archival preservation 133(72.7%), pest management/control 118(64.5%), monitoring 112(61.2%) and microfilming 93(50.8%). It can be concluded that the different methods used for the preservation and conservation of library resources in universities in Delta and Edo States are cleaning and repair, conservation treatment, environmental controls, digital preservation, protective enclosures, binding and rebinding, disaster preparedness, archival preservation, pest management/control, monitoring and microfilming.

**Research Question 3:** What is the extent of preservation and conservation of library resources in university libraries in Edo and Delta State?

Data in Table 3 provides the answer to this question.

**Table 3: Extent of Preservation and Conservation of Library Resources in University Libraries**

<b>Extent of Preservation and Conservation of Information Resources</b>	<b>VHE</b>	<b>HE</b>	<b>LE</b>	<b>VLE</b>	$\bar{X}$	<b>SD</b>
Books	50	105	20	8	3.08	0.75
Journals	35	100	30	18	2.83	0.85
Newspapers	50	106	15	12	3.06	0.79
Magazines	40	96	26	21	2.85	0.90
Manuscripts	52	90	33	8	3.02	0.80
Audio-visual materials	64	89	17	13	3.11	0.85
Reports	26	112	25	20	2.79	0.82
Government publications	10	80	90	3	2.53	0.63
Maps	35	100	42	6	2.90	0.74
Atlases	22	100	54	7	2.75	0.71
<b>Aggregate Mean</b>					<b>2.89</b>	<b>0.73</b>
Criterion Mean					2.50	

Table 3 shows that with an aggregate mean of 2.89 (Std. = 0.73) which is greater than the criterion mean of 2.50, it can be concluded that the extent of preservation and conservation of library resources in university libraries in Edo and Delta State is high.

**Research Question 4:** What is the extent of ICT skills possessed by librarians for the preservation and conservation of library resources?

Data in Table 4 provides the answer to this question.

**Table 4: ICT Skills Possessed by Librarians for the Preservation and Conservation of Library Resources**

<b>Extent of ICT Skills Possessed by Librarians for Preservation and Conservation</b>	<b>VHE</b>	<b>HE</b>	<b>LE</b>	<b>VLE</b>	<b><math>\bar{X}</math></b>	<b>SD</b>
I can conveniently use computer programs to create digital records of library materials.	40	112	20	11	2.99	0.76
I am proficient in using digital scanning and imaging tools to preserve library materials.	63	92	18	10	3.14	0.80
I am familiar with the various applications used to store and manage library collections.	35	99	32	17	2.83	0.84
I am knowledgeable in the use of web-based systems to conserve library materials.	56	112	14	1	3.22	0.60
I am able to use specialized software for the cataloging and classification of library resources.	62	98	14	9	3.16	0.77
I am familiar with the use of digital curation tools to ensure the long-term preservation of library materials.	49	109	20	5	3.10	0.69
I am able to use advanced software to preserve and restore fragile library materials.	50	98	25	10	3.03	0.79
I am proficient with the use of QR Code to track the condition of library materials and assess conservation needs.	41	111	16	15	2.97	0.80
I have skills in the use of library automation software's for preserving electronic resources	25	121	23	14	2.86	0.74
I am knowledgeable in the use of digital tools to document and monitor						

library collections.	36	96	31	20	2.81	0.88
I am proficient in the use of digital tools to identify and prevent damage to library materials.	53	104	20	6	3.11	0.72
<b>Aggregate Mean</b>					3.02	0.72
<b>Criterion Mean</b>						

Table 4 shows that with an aggregate mean of 3.02 (Std. = 0.72) which is greater than the criterion mean of 2.50, it can be concluded that the extent of ICT skills possessed by librarians for the preservation and conservation of library resources in Edo and Delta State is high.

### Testing of the Hypothesis

H<sub>0</sub>1: There is no significant relationship between librarians' ICT skills and the preservation and conservation of library resources.

Data in Table 5 provides the answer to this hypothesis.

**Table 5: Relationship Between Librarians' ICT Skills and Preservation and Conservation of Library Resources**

		Extent of ICT Skills Possessed by Librarians	Extent of Preservation and Conservation of Library Resources
Extent of ICT Skills Possessed by Librarians	Pearson Correlation	1	.985**
	Sig. (2-tailed)		.000
	N	183	183
Extent of Preservation and Conservation of Library Resources	Pearson Correlation	.985**	1
	Sig. (2-tailed)	.000	
	N	183	183

From Table 5, Pearson correlation coefficient  $r$  is 0.985 which implies 99% degree of relationship. Therefore, the degree of relationship is high. Since the significant value (Sig. 2-tailed) is 0.000 (which is less than 0.05), it can be concluded that librarians' ICT skills has a significant relationship with the preservation and conservation of library resources in university libraries in Edo and Delta States is high. The null hypothesis is therefore rejected

implying that an increase/decrease in librarians' ICT skills may lead to a corresponding increase/decrease in the preservation and conservation of library resources.

### **Discussion of Findings**

This study found that the types of information resources that are accessible for preservation and conservation in university libraries in the states of Delta and Edo are as follows: books, magazines, newspapers, audio-visual materials, journals, manuscripts, government publications, maps, reports, and atlases. This finding is in agreement with the one that was made by Muhammed et al. (2020), which discovered that the information resources that are available in the Kaduna State University Library are books, periodicals, theses, dissertations, undergraduate projects, audiovisual materials, journals, government publications, newspapers and magazines, and electronic resources (both paid and free Databases). The conclusion that can be drawn from this study is that the university libraries in the states of Edo and Delta have access to a diverse collection of information resources that ought to be conserved for future generations.

This study revealed that the various approaches that are utilized for the preservation and conservation of library resources in universities located in the states of Delta and Edo are as follows: cleaning and repair, conservation treatment, environmental controls, digital preservation, protective enclosures, binding and rebinding, disaster preparedness, archival preservation, pest management/control, monitoring, and microfilming. This finding is in agreement with the findings of Tondo et al. (2022), who discovered that the Francis Idachaba Library uses a variety of techniques to preserve its information resources. These techniques include binding, photocopying, lamination, reformatting, microfilming, cleaning and dusting, installation of air conditions, digital imaging, use of insecticide, shelving of books to allow for free flow of air, and adequate security. Based on the data, it has been determined that the university libraries in Edo and Delta states Nigeria continue to employ the traditional ways of preservation and conservation of their library resources by using these approaches.

According to the findings of this study, the degree of preservation and conservation of library materials in university libraries in Delta and Edo states is rather high. This conclusion is in contrast to the one that was discovered by Bashorun et al. (2021), which discovered that there was a relatively low adoption of most preservation strategies, except dusting and cleaning, correct shelving of books, and physical security. The results of this study also indicate that librarians in Edo and Delta State have a high level of information and communication technology (ICT) abilities, which is important for the preservation and protection of library resources. This finding agrees with the one by David and Soyemi (2021),

that the degree of information and communication technology (ICT) competence required for digital preservation among library professionals in Nigerian private university libraries is high.

According to the findings of the study, librarians' information and communication technology (ICT) skills have a significant relationship with the preservation and conservation of library resources in university libraries in Edo and Delta States. This suggests that an increase or decrease in the information and communication technology skills of librarians may lead to a corresponding increase or decrease in the preservation and conservation of library resources. Akintonde and Awujoola (2022), discovered that there is a substantial association between information and communication technology (ICT) abilities and digital preservation practices in nine university libraries located in the south-western region of Nigeria, this conclusion is in agreement with their findings. This indicates that there is a rise or fall in the amount of information and communication technology (ICT) skills possessed by librarians in the context of the preservation and conservation of library resources. As a result, librarians ought to acquire additional ICT skills that will improve their performance in the preservation and conservation of library resources.

### **Conclusion**

This study investigated the correlation between the preservation and conservation of information resources and librarians' information and communication technology (ICT) skills in university libraries in Delta and Edo States. Acknowledging the importance of preservation in forecasting the efficacy of service delivery, particularly in the face of budgetary difficulties, the research highlights the streamlined procedure made possible by ICT for resource maintenance and conservation. The acquisition of substantial ICT abilities by librarians becomes crucial for effectively utilizing electronic information resources to protect and sustain library holdings. Consequently, the study established that university libraries in the aforementioned states have recognised books, periodicals, newspapers, audio-visual materials, journals, manuscripts, government publications, maps, reports, and atlases as among the information resources that should be preserved.

The study further outlines diverse preservation methods, including cleaning and repair, conservation treatment, environmental controls, digital preservation, protective enclosures, binding and rebinding, disaster preparedness, archival preservation, pest management/control, monitoring, and microfilming. Importantly, the research concludes that the extent of preservation and conservation in university libraries of Edo and Delta States is high. Furthermore, the findings confirm a high level of ICT abilities among librarians in Edo

and Delta States, a prerequisite for the efficient preservation and protection of library resources. The conclusive establishment of a significant relationship between librarians' ICT skills and the preservation and conservation of resources implies that changes in ICT skills may correspondingly impact the preservation and conservation outcomes in university libraries of Edo and Delta States.

### **Recommendations**

In light of the findings, the study recommends the following:

1. The many different information resources that are utilized in libraries ought to receive a greater amount of attention to make their application in libraries more effective than it could otherwise be.
2. It is recommended that the library make use of additional items that are suitable for preservation and conservation.
3. It is recommended that the scope of preservation and protection of library materials, including but not limited to books, journals, newspapers, government publications, maps, and atlases, be extended.
4. In the instance of Edo and Delta States, library managers ought to be in favour of the ongoing professional development of librarians. The preservation and protection of library materials require that librarians get ongoing training and upgrades to acquire greater levels of information and communication technology (ICT) capabilities.
5. Because the possession of information and communication technology (ICT) skills by librarians has a significant impact on the preservation and conservation of library resources, higher education institutions in Edo and Delta states, including universities, should develop a framework and policies that will ensure the acquisition of ICT skills by librarians and other stakeholders to improve the preservation and conservation of library resources.

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