ICT Phobia, Interpersonal Skills and E-Service Delivery in Research Institute Libraries in Ibadan, Nigeria

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ABSTRACT

The integration of Information and Communication Technology (ICT) in library services has transformed information dissemination. However, ICT phobia, which is fear or anxiety related to using technology, poses significant challenges, particularly in developing countries like Nigeria. This study examined the relationship between ICT phobia, interpersonal skills, and e-service delivery in research institute libraries in Ibadan, Nigeria, using the survey research design. The target population included all 101 library personnel across eight research institutes in Ibadan, Oyo State. Data was collected through a structured questionnaire and analyzed using descriptive and inferential statistics via SPSS. Findings revealed consistent e-service delivery among library personnel, a moderate level of ICT phobia, and a high level of interpersonal skills. The study identified a significant negative relationship between ICT phobia and e-service delivery ($r = -.241$, $p < 0.05$), as well as a significant positive relationship between interpersonal skills and e-service delivery ($r = .418$, $p < 0.05$). Both ICT phobia and interpersonal skills significantly influenced e-service delivery. The study concluded that while ICT phobia hampers service delivery, strong interpersonal skills foster a supportive environment that enhances e-service delivery. To address these issues, the study recommended consistent training in ICT and interpersonal communication to help librarians overcome ICT phobia and improve service delivery.

Introduction

Libraries are specialised institutions responsible for delivering information services to user community wherein they are established. Service deliveries in libraries are practices and processes that ensure users have efficient and effective access to information, resources and support. According to Kumar (2020), library information service delivery refers to the systematic provision of information resources and services by libraries to meet the diverse and specific needs of their users. It encompasses a range of activities, including specialised reference services, information literacy instruction and access to both digital and physical collections that

are particularly relevant to the library's specialised area of focus. By providing these essential information resources and services, libraries play a crucial role in advancing the mission of their parent institutions.

The services offered by libraries can be broadly categorised into two main types: technical services and readers' services. Technical services are crucial for the operations of libraries and include tasks like collection development, e-resources and serials management, cataloging and classification, bindery and reprography services, and special collections management. Often considered the backbone of library operations, technical services ensure that materials are well-organised, accessible and preserved to support the specific research or professional needs of the library users. As Collins et al. (2021) pointed out, technical services are essential to the overall functionality of a library, serving as the foundation for all other services.

On the other hand, readers' services focus on enhancing interaction and providing support to users, thereby enriching their overall experience with the library. Key components of readers' services include specialised reference services where librarians assist users by answering queries and helping locate specialised information and resources, often through personalised consultations or online interactions (Sweeney, 2019). Circulation services include checking out and returning materials, managing user accounts and overseeing fines and fees, all aimed at ensuring adherence to library policies. Information literacy instruction is offered to help users effectively search for, evaluate and utilise information, maximizing the use of available resources (Sweeney, 2019). Interlibrary loan services enable access to materials not available in the library's own collection, thereby broadening the range of resources available to users. Additionally, dedicated study and collaboration spaces, such as quiet study rooms and computer labs, are provided to support research and collaboration. By offering these services, libraries play a critical role in supporting the information, research, professional development and operational needs of their target audience.

In the digital age, libraries have embraced electronic service delivery to enhance access to their resources and services. This shift involves leveraging technology to provide users with digital access to information, resources and support, thus ensuring that library services are more accessible, efficient and responsive to users' needs. Electronic service delivery encompasses a wide range of services, including online catalogs, digital collections, e-books, electronic journals, remote reference services and virtual learning environments. The integration of ICT in libraries is not without challenges, as libraries face unique obstacles related to ICT phobia and the interpersonal skills of their staff.

ICT phobia, or technophobia, refers to the fear and anxiety associated with using technology. This phenomenon can significantly hinder the effective delivery of electronic services in libraries, as staff may be reluctant to adopt new technologies (Tsafe, 2023). On the other hand, according to Jones (2018), strong interpersonal skills, such as communication, empathy and teamwork, are crucial for successful e-service delivery. Librarians with these skills can better assist users, manage digital resources and foster a positive environment for learning and research. Dapo-Asaju& Ekehand Akesode (2024) examined the interpersonal communication of library professionals in library service at Teslim Elias Library, Lagos State University. The study revealed a positive correlation between the interpersonal communication skills of library staff and the satisfaction of library users. This indicates that well-developed interpersonal skills can significantly enhance the user experience and overall service quality in libraries.

In the digital age, the role of libraries has evolved significantly with the integration of Information and Communication Technology (ICT). Libraries are pivotal in providing access to electronic resources, supporting research activities and facilitating knowledge dissemination. However, the implementation of e-services in libraries is met with several challenges that can undermine their effectiveness. One of the primary issues is ICT phobia among library staff. This phobia can prevent librarians from fully embracing ICT tools necessary for efficient e-service delivery. Despite the availability of training programs and support mechanisms, some librarians still struggle to overcome their technophobia, thereby limiting their ability to provide optimal services.

Moreover, interpersonal skills play a crucial role in the effective delivery of library services. These skills include communication, empathy, teamwork and problem-solving abilities. In the context of e-service delivery, librarians must possess strong interpersonal skills to assist users with navigating digital resources, addressing technical issues and providing personalised support. However, there is a notable variation in the level of interpersonal skills among library staff, which can impact the consistency and quality of e-services provided. The combination of ICT phobia and lack of interpersonal skills presents a complex challenge for libraries. Librarians who are apprehensive about technology may also lack the necessary interpersonal skills to compensate for their technological shortcomings, leading to a compounded effect on service delivery. Consequently, the effectiveness of e-service delivery in these libraries may be compromised, affecting the research community's access to vital information and resources. Therefore, this study investigated the extent to which ICT phobia and interpersonal skills influence e-service delivery in research institutes' libraries in Ibadan, Nigeria.

Objectives of the study

The main objective of the study is to examine the influence of ICT phobia, interpersonal skills on e-service delivery in research institutes libraries in Ibadan, Nigeria. The specific objectives are to:

i.   identify the types of e-services delivered by library personnel in research institutes libraries in Ibadan;
ii. find out the frequency of e-service delivery by library personnel in research institutes libraries in Ibadan;
iii. ascertain the level of ICT phobia by library personnel in research institutes libraries in Ibadan;
iv. find out the level of interpersonal skills by library personnel in research institutes libraries in Ibadan;
v.   Determine the relationship between ICT phobia and e-service delivery by library personnel in research institutes libraries in Ibadan.
vi. Determine the relationship between interpersonal skills and e-service delivery by library personnel in research institutes libraries in Ibadan.
vii. Determine joint influence of ICT phobia and e-service delivery by library personnel in research institutes libraries in Ibadan.
viii.   Identify the challenges to e-service delivery by library personnel in research institutes libraries in Ibadan.

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Research Questions

The following are the study's research question:

1. What types of e-services are delivered by library personnel in research institutes libraries in Ibadan?
2. What is the frequency of e-service delivery by the personnel?
3. What challenges inhibit e-service delivery by library personnel in research institutes libraries in Ibadan?
4. What is the level of ICT phobia among library personnel in research institutes libraries in Ibadan?
5. What is the level of interpersonal skills by library personnel in research institutes libraries in Ibadan?

Hypotheses

1. There is no significant relationship between ICT phobia and e-service delivery by library personnel in research institutes libraries in Ibadan.
2. There is no significant relationship between interpersonal skills and e-service delivery by library personnel in research institutes libraries in Ibadan.
3. ICT phobia and interpersonal skills have no significant joint influence on e-service delivery by library personnel in research institutes libraries in Ibadan.

Literature Review

E-service delivery by library personnel has become increasingly vital in the modern digital age, driven by technological advancements and the changing needs of library users. Libraries have transitioned from traditional physical spaces to dynamic digital environments, offering a range of electronic services such as digital resources, online catalogues and virtual reference services. This shift necessitates that library personnel develop and use strong ICT skills and adapt to new technologies to ensure efficient and effective service delivery. The literature has highlighted he evolving role of library personnel in delivering e-services, driven by technological advancements and changing user expectations. In (2019), Ekere, Ewulum, Eze, Okpala, and Ebobo examined the use of modern technologies for effective service delivery in selected special libraries in South-East Nigeria, through a descriptive survey design. The findings revealed that modern technologies were not being adequately utilised in service delivery across most special libraries in the region, despite their potential to complement existing services. The study highlighted the need for better sensitization of librarians on the appropriate use of modern technologies, as well as the importance of adequate funding and consistent training to enhance their skills.

A study by Ajani and Buraimo (2021) assessed the impact of automation on university library services in South West Nigeria. The findings revealed that while automation has a positive impact on library services, challenges such as lack of technical support, funding, and technophobia among library personnel hinder its full potential. Ilesanmi (2023) explored the ICT skills of librarians in private universities in Southern Nigeria. The study found that librarians

with basic ICT skills were more effective in delivering various library services, highlighting the importance of continuous ICT skill development.

Dime and Okeji (2023) also investigated the use of cloud computing technologies for library service delivery by librarians in university libraries across Africa. Utilising an online survey method, qualitative data was collected from 315 librarians working in 67 university libraries in English-speaking African countries. The findings identified YouTube, Google Drive, OPAC, Google Form, Gmail, and Google Scholar as the most frequently used cloud computing technologies. These technologies are primarily utilized for storing and sharing files, sharing videos for library orientations and other content, collaborating on research projects, conducting user satisfaction surveys, online document editing, and providing virtual reference services. The study also highlighted significant challenges faced by librarians, including lack of funds, data security and privacy concerns, irregular staff training and development, and limited knowledge and awareness of cloud computing technologies.

From their survey in 2021, Edom and Ihim found that ICT is extensively utilised in various aspects of library service delivery such as selective dissemination of information, current awareness services, reference services, user education, circulation, acquisition and research and development. The findings indicated that ICT has significantly enhanced the speed and efficiency of library services, provided up-to-date information, and facilitated remote access to information for users. However, the study also identified several challenges hindering the effective use of ICT in academic libraries, including poor staff attitude towards ICT, lack of ICT skills and competence, erratic power supply, and inadequate maintenance of equipment.

The study by Unegbu, Ikonne, and Ohwofasa (2023) investigated the influence of ICT application on service delivery in public libraries. The research was a survey conducted among 319 library personnel. Data was collected using a structured questionnaire, and analysis was conducted using frequency counts and percentages. Findings revealed that ICT competence significantly influenced service delivery in public libraries and ICT skills had significant influence on service delivery. These findings underscore the importance of ICT competence in enhancing the efficiency and effectiveness of library services in public libraries. Similarly, Tshabalala and Dube (2024) investigated how emerging technologies, such as artificial intelligence (AI), can improve service delivery in digital libraries. The study emphasised the need for digital competencies and algorithmic literacy among library staff to enhance service delivery and user satisfaction.

The integration of Information and Communication Technology (ICT) into library operations has significantly transformed service delivery, enhancing efficiency and accessibility. However, the phenomenon of ICT phobia, also referred to as technophobia, remains a critical barrier, particularly among library personnel. Technophobia, characterised by fear or apprehension towards technology, hinders the effective adoption and utilisation of ICT tools, thereby affecting the overall quality of e-service delivery. A study by Busayo, Adekoya, and Fasae (2024) sheds light on this issue by exploring the prevalence and implications of technophobia among librarians in higher educational institutions in Nigeria. The research revealed that technophobia disproportionately affects librarians based on demographic factors, notably age. Specifically, older librarians exhibited a higher degree of technophobia compared to their younger counterparts. This disparity was linked to differences in exposure to technology, adaptability to technological advancements and confidence in using ICT tools.

Interpersonal skills are increasingly recognised as essential for the successful delivery of e-services in library settings, complementing technical competencies and enhancing user satisfaction. These skills, encompassing effective communication, empathy and the ability to build rapport, play an important role in promoting library services and ensuring a user-centered approach. Koganuramath and Angadi (2023) explored this topic through the lens of public relations within libraries, emphasising how interpersonal skills bolster librarians' ability to engage with patrons effectively. According to the authors, librarians equipped with strong communication and public relations skills are better positioned to understand and address user needs, thereby promoting library resources and services more efficiently.

The study by Agunsoye (2023) focused on assessing the interpersonal communication skills of library personnel in academic libraries across eight tertiary institutions in Kogi State, Nigeria, specifically in the context of providing reference services. Utilizing a descriptive survey research design, data were collected from 120 professional and para-professional librarians through a structured questionnaire. The findings revealed that academic library personnel in Kogi State possess a high level of interpersonal communication skills, which are highly effective in delivering reference and information services. The study recommended that academic libraries in Kogi State should proactively enhance their reference services to better meet users' needs. Additionally, it suggested that librarians should develop various verbal and non-verbal communication skills to provide accurate and timely information, thus improving user satisfaction and increasing patronage.

The study by Siti Wuryan, Mustofa, and Febrian (2023) aimed to enhance library services for people with disabilities by strengthening interpersonal communication. Motivated by the neglect of individuals with disabilities in library services, the research used a qualitative, in-depth case study approach, gathering data through online review of books and journals. The findings stressed the necessity for training librarians in interpersonal communication specific to users with disabilities. According to the authors, librarians need to adapt to Information and Communication Technology (ICT) and focus on five key areas: reliability, responsiveness, assurance, empathy and tangibility. The study highlighted that effective interpersonal communication is crucial for understanding and assisting users with disabilities, thereby providing them with the same quality of service as other users and minimising potential misunderstandings. The results emphasised that librarians equipped with these skills can significantly improve the overall library experience for people with disabilities, fostering a more inclusive and supportive environment. The authors recommended integrating these communication skills into librarian training programs to enhance service delivery for disabled patrons.

Methodology
The study employed the survey research design, specifically of the correlational type, to investigate the relationships among variables. The population for this research consisted of all 101 library personnel working in eight research institutes located in Ibadan, Oyo State, Nigeria. The research institutes are: Forestry Research Institute of Nigeria (FRIN), Nigerian Institute of Horticulture Research (NIHORT), International Institute of Tropical Agriculture (IITA), Institute of Agriculture and Training (IAR&T), Cocoa Research Institute of Nigeria (CRIN), National Centre for Genetic Resources and Biotechnology (NAGRAB), National Cereal Research Institute (NCRI), and Nigeria Stored Products Research Institute (NSPRI). Given the relatively

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small and manageable size of the population, the researcher utilized the total enumeration method, also known as census sampling, to ensure that all members of the population were included in the study. This approach was deemed appropriate as it allowed for a comprehensive representation of the population, thereby enhancing the generalizability of the findings within the specified context.

Data was collected using a structured questionnaire. The data obtained were subjected to both descriptive and inferential statistical analyses. Descriptive statistics were used to summarize and present the basic features of the data, providing an overview of the respondents' characteristics and their responses. Pearson Product Moment Correlation (PPMC) on the other hand, was employed to explore relationships among the variables while multiple linear regression was used to ascertain the influence of the independent variables on the dependent. The analyses were conducted using SPSS (Statistical Product and Service Solutions), a widely recognized software tool for statistical analysis in social science research.

Results

Research question one: What types of e-services are delivered by library personnel in research institutes libraries in Ibadan?

Table 1: Types of e-services delivered by library personnel in research institutes libraries in Ibadan

S/N	Types of e-service delivery	SA	A	D	SD	Mean	Std. Dev.
1	The library provides current awareness services to keep researchers informed about new resources and developments.	37 41.1%	53 58.9%	0	0	3.41	.495
2	E-learning resources such as workshops, tutorials, or guides on using library resources are available.	28 31.1%	62 68.9%	0	0	3.31	.466
3	The library maintains a digital repository for hosting research publications, theses, and datasets.	45 50%	27 30%	18 20%	0	3.30	.785
4	Virtual reference and information services are available through chat, email, or video conferencing.	37 41.1%	35 38.9%	18 20%	0	3.21	.757
5	Selective dissemination of information (SDI) is provided based on researchers' specific interests.	19 21.1%	71 78.9%	0	0	3.21	.410
6	The library provides plagiarism detection services using tools like Turnitin to support research integrity.	18 20%	72 80%	0	0	3.20	.402
7	Researchers have access to e-resources such as e-journals, e-books, and research databases.	27 30%	45 50%	18 20%	0	3.10	.704
8	The library provides an Online Public Access Catalogue (OPAC) for searching the library's collections.	27 30%	45 50%	18 20%	0	3.10	.704
9	Bibliographic and citation management support is offered using tools like EndNote, Mendeley, Zotero etc.	10 11.1%	71 78.9%	9 10%	0	3.01	.462
10	The library offers electronic document delivery services for accessing digital copies of articles and	17 18.9%	55 61.1%	18 20%	0	2.99	.627

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	reports.							
	Weighted Mean = **3.18**							

Decision Rule: 1.0-1.74 = Strongly Disagree; 1.75-2.49 = Disagree; 2.50-3.24 = Agree; 3.25-4.0 = Strongly Agree

The findings indicate that research institute libraries in Ibadan provide a range of e-services, with current awareness services ($\bar{x}$ = 3.41), e-learning resources ($\bar{x}$ = 3.31) and digital repositories ($\bar{x}$ = 3.30), being the most prominent and widely available. Virtual reference services ($\bar{x}$ = 3.21), selective dissemination of information ($\bar{x}$ = 3.21), and access to e-resources ($\bar{x}$ = 3.10) were also well-supported. While plagiarism detection ($\bar{x}$= 3.20) and bibliographic management tools ($\bar{x}$ = 3.01) were available, electronic document delivery ($\bar{x}$ = 2.99) showed slightly lower accessibility. The weighted mean of 3.18 is an indicates a consensus among the respondents that the service delivery was high although, bibliographic/citation management ($\bar{x}$ = 3.01) and electronic document delivery ($\bar{x}$ = 2.99) can be enhanced,

Research question two: What is the frequency of e-service delivery by library personnel in research institutes libraries in Ibadan

Table 2: The frequency of e-service delivery by library personnel in research institutes libraries in Ibadan

S/N	Frequency of e-service delivery	Daily	2–3 times a week	weekly	Monthly	Never	Mean	Std Dev
1	Virtual reference and information services through chat, email, or video conferencing.	35 38.9%	55 61.1%	0	0	0	5.39	.490
2	Electronic document delivery services for accessing digital copies of articles and reports.	37 41.1%	35 38.9%	18 20%	0	0	5.21	.757
3	Current Awareness Services to keep researchers informed about new resources and developments.	9 10%	81 90%	0	0	0	5.10	.302
4	Selective dissemination of information (SDI) based on researchers' specific interests.	9 10%	81 90%	0	0	0	5.10	.302
5	Bibliographic and citation management support.	9 10%	81 90%	0	0	0	5.10	.302
6	Online Public Access Catalogue (OPAC) for searching the library's collections	10 11.1%	71 78.9%	9 10%	0	0	5.01	.462
7	Access to e-resources such as e-journals, e-books, and research databases.	27 30%	27 30%	36 40%	0	0	4.90	.835
8	Access to the library's digital repository	0	54 60%	36 40%	0	0	4.60	.493
9	Plagiarism detection services using tools like Turnitin to support research integrity	10 11.1%	43 47.8%	5 5.6%	32 35.5%	0	4.10	1.423
10	E-learning resources such as workshops, tutorials, or guides on using library resources.	5 5.6%	44 48.9%	0	39 45.5%	0	3.82	1.458
	Weighted Mean = **4.83**							

The findings in Table 2 reveal the frequency of e-service delivery by library personnel in research institute libraries in Ibadan. Virtual reference services (x̄ = 5.39) and current awareness services (x̄ = 5.10) were the most frequently provided, occurring 2-3 times a week or daily. Similarly, selective dissemination of information (x̄ = 5.10) and bibliographic management support (x̄ = 5.10) were frequently offered. Access to e-resources (x̄ = 4.90) and OPAC (x̄ = 5.01) were also regularly available, while digital repository access (x̄ = 4.60) was provided weekly or 2-3 times a week. E-learning resources (x̄ = 3.82) and plagiarism detection services (x̄ = 4.10) were less frequent, with occasional or monthly delivery. Overall, the results suggest frequent e-service delivery by the libraries.

Research question three: What is the level of ICT phobia by library personnel in research institutes libraries in Ibadan

Table 3: Level of ICT phobia by library personnel in research institutes libraries in Ibadan

S/N	Level of ICT phobia	SA	A	D	SD	Mean	Std Dev
1	**Level of ICT phobia**	**SA**	**A**	**D**	**SD**	**Mean**	**Std Dev**
2	I find it difficult to keep up with advancements in ICT.	55 61.1%	35 38.9%	0	0	3.61	.490
3	I believe that ICT tools are too complicated for me to learn.	27 30%	63 70%	0	0	3.30	.461
4	I feel anxious when I have to use new ICT tools and software.	19 21.1%	71 78.9%	0	0	3.21	.410
5	I avoid tasks that require the use of computers or other digital devices.	28 31.1%	53 58.9%	9 10%	0	3.21	.609
6	I would rather not use ICT in my daily work activities.	28 31.1%	53 58.9%	9 10%	0	3.21	.609
7	I feel overwhelmed by the rapid changes in ICT.	26 28.9%	55 61.1%	9 10%	0	3.19	.598
8	I prefer traditional library methods over digital solutions.	18 20%	63 70%	9 10%	0	3.10	.542
9	I often experience frustration when dealing with technical issues.	18 20%	63 70%	9 10%	0	3.10	.542
10	I feel uncomfortable using computers, even for simple tasks.	81 90%	9 10%	0	0	2.90	.302
Weighted mean = 3.17							

Decision Rule: 1.0-1.74 = Very Low; 1.75-249 = Low; 2.50-3.24= High; 3.25-4.0 =Very High

The findings in Table 4 reveal the level of ICT phobia among library personnel in research institute libraries in Ibadan. A significant proportion of personnel reported difficulty keeping up with ICT advancements (x̄ = 3.61) and feeling overwhelmed by rapid changes in ICT (x̄ = 3.19). Many also expressed anxiety about using new ICT tools (x̄ = 3.21), frustration with technical issues (x̄ = 3.10), and a belief that ICT tools are too complicated to learn (x̄ = 3.30). While some personnel felt uncomfortable using computers (x̄ = 2.90) and stressed about learning new ICT skills (x̄ = 2.90), others preferred traditional methods over digital solutions (x̄ = 3.10). The

weighted mean (3.17) indicates a high level of ICT phobia, which could hinder the effective adoption and use of e-services in these libraries.

Research question four: The level of interpersonal skills by library personnel in research institutes libraries in Ibadan

Table 4: Level of interpersonal skills by library personnel in research institutes libraries in Ibadan

S/N	Level of interpersonal skills	SA	A	D	SD	Mean	Std Dev
1	My ability to handle conflicts and disagreements professionally.	54 60%	36 40%	0	0	3.60	.493
2	My approachability and openness to questions from library users.	54 60%	36 40%	0	0	3.60	.493
3	My ability to communicate clearly and effectively with my colleagues.	46 51.1%	44 48.9%	0	0	3.51	.503
4	My helpfulness and constructive criticism.	28 31.1%	62 68.9%	0	0	3.31	.466
5	My ability to build positive relationships with library users and staff.	46 51.1%	26 28.9%	18 20%	0	3.31	.788
6	My ability to work collaboratively with others to achieve common goals.	28 31.1%	62 68.9%	0	0	3.31	.466
7	My ability to manage my emotions during challenging interactions.	44 48.9%	28 31.1%	18 20%	0	3.29	.782
8	My confident when interacting with library users.	26 28.9%	64 71.1%	0	0	3.29	.456
9	My ability to adapt my communication style to suit different audiences.	18 20%	72 80%	0	0	3.20	.402
10	My ability to actively listen to the needs and concerns of library users.	18 20%	72 80%	0	0	3.20	.402
Weighted mean = 3.36 Criterion mean = 2.50							

Decision Rule: 1.0-1.74 = Strongly Disagree; 1.75-2.49 = Disagree; 2.50-3.24 = Agree; 3.25-4.0 = Strongly Agree

The results in Table 4 highlight the level of interpersonal skills among library personnel in research institute libraries in Ibadan. Personnel demonstrated strong interpersonal skills, particularly in handling conflicts professionally ($\bar{x}$ = 3.60), being approachable to users ($\bar{x}$ = 3.60), and communicating clearly with colleagues ($\bar{x}$ = 3.51). They also reported confidence in interacting with users ($\bar{x}$ = 3.29), working collaboratively ($\bar{x}$ = 3.31), providing constructive feedback (M = 3.31), and building positive relationships ($\bar{x}$ = 3.31). The weighted mean (3.36) significantly exceeds the criterion mean (2.50), indicating a high level of interpersonal skills, which likely contributes to effective service delivery and positive user experiences in these libraries.

Research question five: The challenges to e-service delivery by library personnel in research institutes libraries in Ibadan

Table 5: Challenges to e-service delivery by library personnel in research institutes libraries in Ibadan

S/N	Challenges to e-service delivery	Freq %
1	Insufficient and outdated technology infrastructure affects the efficiency of e-service delivery.	63 70%
2	Insufficient and outdated technology infrastructure affects the efficiency of e-service delivery.	54 60%
3	Frequent power outages disrupt digital services and access to online resources.	45 50%
4	Slow internet speeds make it difficult to access and download digital content	45 50%
5	Absence of clear policies and guidelines for e-service delivery complicates the implementation process.	45 50%
6	Inconsistent subscriptions to digital databases and journals limit access to up-to-date information.	37 41.1%
7	Resistance from library personnel who are accustomed to traditional methods of service delivery impede the adoption of e-services	37 41.1%
8	The absence of robust cybersecurity measures exposes library systems to risks such as hacking, data breaches, and malware attacks	28 31.1%
9	Researchers and users are not fully aware of the available e-services, limiting their usage and the potential impact of these services	27 30%
10	Lack of support and commitment from library management affects the overall delivery of e-services	18 20%

The findings in Table 3 highlight the challenges to e-service delivery in research institute libraries in Ibadan. . Seventy percent of the respondents indicated that frequent power outages and inconsistent subscriptions to digital resources (60% of respondents) were the most significant challenges, followed by slow internet speeds (50%), lack of clear policies (50%), and limited user awareness of e-services (50%). Insufficient and outdated technology infrastructure (30%), resistance from library personnel (41.1%), cybersecurity vulnerabilities (41.1%), and lack of management support (31.1%) were also notable barriers. The results indicate that these challenges significantly hinder e-service delivery, with infrastructure, power supply, and policy issues being the most critical areas needing improvement.

Hypothesis one: There is no significant relationship between ICT phobia and e-service delivery by library personnel in research institutes libraries in Ibadan

Table 6: Relationship between ICT phobia and e-service delivery by library personnel in research institutes libraries in Ibadan

Variables	N	Mean	Std.Dev	R	P	Remark
ICT phobia	90	3.17	.263	-.241	.022	Sig.
e-service delivery	90	5.09	.316			

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The results in Table 6 indicate a significant negative relationship between ICT phobia and e-service delivery among library personnel in research institute libraries in Ibadan (r = -.241, p < 0.05). The significant negative correlation implies that higher levels of ICT phobia among library personnel are associated with lower levels of e-service delivery. The null hypothesis one is, thus, rejected. This finding underscores the importance of addressing ICT-related anxieties and improving digital competencies among library staff to enhance the effectiveness and consistency of e-service delivery in these libraries.

Hypothesis two: There is no significant relationship between interpersonal skills and e-service delivery by library personnel in research institutes libraries in Ibadan

Table 7: Relationship between interpersonal skills and e-service delivery by library personnel in research institutes libraries in Ibadan

Variables	N	Mean	Std.Dev	R	P	Remark
Interpersonal skills	90	3.67	.367	.418	.000	Sig.
e-service delivery	90	5.09	.316			

The results in Table 7 reveals a significant positive relationship between interpersonal skills and e-service delivery among library personnel in research institute libraries in Ibadan (r = .418, p < 0.05). This implies that higher levels of interpersonal skills among library personnel are associated with higher levels of e-service delivery. The null hypothesis two is therefore rejected.

Hypothesis three: ICT phobia and interpersonal skills have no significant joint influence on e-service delivery by library personnel in research institutes libraries in Ibadan

Table 8: Joint influence of ICT phobia and interpersonal skills on e-service delivery by library personnel in research institutes libraries in Ibadan

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.419	.175	.157	.28992

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	Remark
Regression	1.556	2	.778	9.258	.000	
Residual	7.313	87	.084			Sig.
Total	8.869	89				
Dependent Variable: e-service delivery						
Predictors: (Constant), Interpersonal skills, ICT_Phobia						

The analysis presented in Table 8 demonstrates that ICT phobia and interpersonal skills significantly influence e-service delivery by library personnel in research institutes in Ibadan. The model summary indicates a coefficient of determination (R^2) of 0.175, suggesting that approximately 17.5% of the variance in e-service delivery can be explained by the combined effect of ICT phobia and interpersonal skills. The ANOVA results show that the regression

model is statistically significant ($F_{(2, 87)} = 9.258$, $p < .001$), indicating that the predictors (ICT phobia and interpersonal skills) together have a significant impact on e-service delivery. The standard error of the estimate is 0.28992, and the adjusted R Square is 0.157, reinforcing the reliability and predictive power of the model. These findings highlight the importance of addressing both ICT phobia and enhancing interpersonal skills to improve e-service delivery in library settings.

The findings of the study indicated that research institute libraries in Ibadan provide a variety of e-services, with Current Awareness Services, digital repositories and e-learning resources being the most prominent. Other services such as virtual reference, selective dissemination of information and access to e-resources were also well-supported, while electronic document delivery was slightly less accessible. This aligns with Dime and Okeji (2023), who found that cloud computing technologies like Google Drive, OPAC, and Gmail were frequently used for file sharing and virtual reference services in African university libraries. Similarly, Ekere et al. (2019) noted that modern technologies, though underutilized in some special libraries, enhance service delivery when properly integrated. The availability of these e-services suggests that sresearch institute libraries in Ibadan are adapting to digital trends, though some areas (e.g., bibliographic management tools and plagiarism detection services) could be strengthened.

The study also found that virtual reference services, current awareness services and selective dissemination of information were the most frequently provided services, often occurring 2-3 times a week or daily. Meanwhile, e-learning resourcesand plagiarism detection services were less frequent, suggesting sporadic usage in the libraries. This finding resonates with Tshabalala and Dube (2024), who emphasized the need for continuous digital competency among librarians to sustain service frequency. However, the lower frequency of some services (e.g., e-learning) suggests infrastructural or training gaps, as highlighted by Ajani and Buraimo (2021), who identified funding and technical support as key barriers. The most significant challenges were frequent power outages, inconsistent digital subscriptions, slow internet speeds and lack of clear policies. Other barriers included resistance to change, cybersecurity risks and insufficient management support. These findings align with Edom and Ihim (2021), who identified erratic power supply, poor ICT skills, and inadequate maintenance as major obstacles in academic libraries. Similarly, Unegbu et al. (2023) found that ICT competence significantly impacts service delivery, reinforcing the need for better infrastructure and training.

The study found a moderate level of ICT phobia among the library personnel, with personnel reporting anxiety about new ICT tools, difficulty keeping up with advancements and frustration with technical issues. This corroborates Busayo et al. (2024), who found that older librarians exhibited higher technophobia, impacting ICT adoption. The findings suggest that ICT phobia is a significant barrier, necessitating targeted training programs to improve digital confidence, as recommended by Unegbu et al. (2023). The respondents demonstrated strong interpersonal skills particularly in handling conflicts, being approachable and communicating effectively. This supports Agunsoye (2023), who found that academic librarians in Kogi State possessed high interpersonal communication skills, enhancing reference services. Similarly, Koganuramath and Angadi (2023) emphasized that interpersonal skills improve user engagement and service promotion, reinforcing the importance of these competencies in digital service delivery. The significant negative correlation between ICT Phobia and E-Service Delivery ($r = -.241$, $p = $

.022) confirms that higher ICT phobia leads to lower e-service delivery. This aligns with Busayo et al. (2024), who found that technophobia reduces ICT usage among librarians.

A significant positive relationship (r = .418, p < .001) was also found between Interpersonal Skills and E-Service Delivery, indicating that better interpersonal skills enhance e-service delivery. This supports Siti Wuryan et al. (2023), who highlighted that effective communication fosters user trust and engagement, particularly in digital environments. The regression model (R^2 = 0.175, p < .001) shows that both ICT phobia and interpersonal skills collectively influence e-service delivery. This finding aligns with literature emphasizing that both technical and soft skills are crucial for digital service efficiency (Koganuramath& Angadi, 2023; Unegbu et al., 2023).

Conclusion

Information and Communication Technologies (ICTs) have great potentials in transforming service delivery in research institute libraries. However, ICT phobia poses significant challenges, particularly in developing countries like Nigeria. In addition, poor interpersonal communication skills can hinder effective user engagement and user satisfaction with digital services for users with special needs. The study examined the relationship between ICT Phobia, interpersonal skills, and e-service delivery in research institute libraries in Ibadan. Findings revealed consistent e-service delivery among library personnel, a moderate level of ICT phobia, and a high level of interpersonal skills. Interpersonal skills correlated positively with e-service delivery while negative correlation was observed between ICT phobia and e-service delivery. The study concludes that ICT phobia posesA holistic approach that combines technological competence with strong interpersonal skills is essential for libraries to effectively meet the diverse needs of their users and to foster a supportive, inclusive and efficient service environment.

Recommendations

The following are recommendations based on the findings of this study:
1. Libraries should consistently provide training programs focused on both ICT skills and interpersonal communication to help librarians overcome ICT phobia and improve service delivery.
2. Library managements should ensure that libraries are equipped with necessary ICT infrastructure, reliable power supply, and maintenance support to facilitate smooth e-service delivery.
3. Library management should also advocate for increased funding to support ICT infrastructure and training initiatives, and implement robust data security measures to build user trust.

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