

**INFLUENCE OF ICT LITERACY SKILL ON LIBRARIANS
WILLINGNESS TO USE ICT**

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**A RESEARCH WORK SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL
MANAGEMENT, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN
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APPROVAL PAGE

I hereby approve this project work as adequate in scope and quality for the partial fulfilment of the requirements for the award of Degree in Bachelor of Science (B.Sc Ed.), Library and Information Science.

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Project Supervisor

Date

CERTIFICATION

This is to certify that this project work was carried out by **EBHODAGHE OSEZUA WISDOM** in the Department of Educational Management, Faculty of Education, University of Benin, Benin City under my supervision

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Date

DEDICATION

This project is dedicated to God Almighty for sparing my life to see this day come through and my parents Mr Ebhodaghe Ehiriemen and Mrs Ebhodaghe Magdalene

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Firstly, I give God Almighty all the glory for the strength in completing my project successfully

And also thank you to my supervisor, Dr. A.c. Eneh for your patience, guidance and support, I consider myself very fortunate for being able to work with a very considerate and encouraging personnel. I am extremely grateful that you took me on as a student and also for your contribution towards the success of this project. The Project Coordinator Dr. Nkechi Obiweluozor

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ABSTRACT

The main purpose of this study was to assess the influence of ICT literacy skill on librarians' willingness to use ICT.

The methodology adopted for this study is the survey research approach, a technique characterized by collecting data through administering questionnaires to respondents. This method aimed to answer the research questions of this study. Accordingly, this approach was employed to explore the impact of information and communication technology (ICT) literacy on librarians' willingness to utilize ICT resources.

This study conducted at John Harris Library, University of Benin, which meticulously examined the impact of information and communication technology (ICT) literacy on librarians' willingness to utilize ICT resources, yielded profound insights. The unanimous response from 118 participating librarians underscored that ICT literacy is a pivotal factor influencing their readiness to embrace ICT in their professional milieu. It was delineated that specific competencies, such as the adeptness in digital information retrieval, proficiency in library management software, digital archiving skills, and familiarity with digital databases and e-journals, are quintessential in bolstering this willingness. Furthermore, the study highlighted the critical role of accessible ICT training and development opportunities in encouraging librarians towards ICT adoption.

CHAPTER ONE

INTRODUCTION

Background to the Study

The role of academic libraries in Nigeria has evolved significantly in recent years, influenced largely by the global shift towards digital information systems and resources. Academic libraries, traditionally seen as repositories of books and print materials, have increasingly adopted digital technologies to meet the changing needs of their users (Racheal, 2020). Academic libraries play a transformative role in supporting research, learning, and teaching activities in Nigerian educational institutions. These libraries are not just physical spaces but information hubs, where the integration of Information and Communication Technology (ICT) is paramount for effective service delivery (Enamudu, Akannam, Odunsi & Olatunji, 2021). However, the extent to which ICT is integrated into these libraries varies considerably, often depending on the availability of resources and the digital literacy of the staff.

ICT in the context of academic libraries in Nigeria involves not only understanding the various digital tools and systems used in these institutions but also recognizing the broader impact of these technologies on library services (Adekoya & Inyang, 2023). ICT in academic libraries encompasses digital databases, online catalogs, electronic journals, e-books, and Internet resources, as well as the hardware and software used to access and

manage these resources (Ayiah & Tamakloe, 2023). The adoption of ICT transforms traditional library practices, enabling more efficient information retrieval, cataloging, and dissemination. Furthermore, ICT facilitates the expansion of library services beyond physical boundaries, allowing remote access to resources, which is particularly beneficial in the Nigerian context where geographical and infrastructural barriers can limit access to information (Ocholla, 2021).

Despite the above importance, the state of ICT in Nigerian academic libraries still presents a complex picture as many academic libraries in Nigeria face challenges in its implementation. According to Adebayo and Iwe (2022), these challenges include inadequate ICT infrastructure, limited funding, and a shortage of skilled personnel. However, there is a growing awareness among library administrators and stakeholders about the necessity of integrating ICT into library operations. This awareness is driven by the need to keep pace with global trends and to meet the evolving demands of library users, who increasingly expect digital access to information and resources (Awoyemi, 2023). However, what still remains a challenge is the willingness of Librarians to use ICT.

Essentially, the willingness of librarians to use ICT in Nigerian academic libraries is a crucial factor in the successful integration of these technologies. This willingness is influenced by several factors, including the librarians' ICT skills, their attitudes towards technology, and the institutional support they receive (Michael & Olayemi, 2023). Studies

have shown that librarians who are confident in their ICT skills are more likely to embrace technological innovations in their work (Idiegbeyan-Ose, Nkiko, and Osinulu, 2016). However, a lack of adequate training and support can hinder their willingness to use ICT, underscoring the need for ongoing professional development and institutional investment in ICT resources (Haji, Shiyo & Mrutu, 2023).

The importance of librarians' willingness to use ICT extends beyond the immediate operational benefits it brings to academic libraries. This willingness is a key driver of innovation and service improvement in these institutions (Gupta, Sanvalia & Bamniya, 2023). As Ezeani and Igwesi (2022) argue, librarians who are enthusiastic about using ICT are more likely to experiment with new technologies and to find creative solutions to information access and management challenges. Their willingness to engage with ICT can also inspire and motivate other staff members, creating a culture of technological proficiency and innovation within the library. One significant factor that influences librarians' willingness to use ICT is the extent of their ICT literacy skills (Shahzad & Khan, 2023).

ICT literacy skills broadly encompasses a range of competencies that are essential for librarians in the digital age. These skills include the ability to effectively use computer hardware and software, navigate digital databases and online catalogs, utilize internet resources for research, and understand basic principles of digital information management and preservation (Ikenwe & Udem, 2023). In addition, ICT literacy for librarians extends to

the ability to critically evaluate online information sources, understand issues related to digital rights and privacy, and possess skills in digital communication and collaboration (Shastri & Chudasma, 2022). These skills are not static; they require continuous development and adaptation in response to evolving technologies and user needs. The importance of ICT literacy skills to librarians in Nigerian academic libraries is multifaceted. These skills are critical for personal professional development and for enhancing the overall quality of library services. As librarians become more proficient in using ICT, they are better equipped to assist users in accessing and utilizing digital resources, thereby improving user satisfaction and engagement with the library (Ahmed, Umar & Dewa, 2020). Furthermore, ICT literate librarians are able to contribute more effectively to the development and implementation of digital strategies within their institutions, ensuring that library services remain relevant and responsive to the needs of their users (Okeji, Tralagba & Obi, 2020).

Various ICT literacy skills relevant to librarians in Nigerian academic libraries include digital information retrieval, electronic resource management, digital preservation, online communication, and data analytics (Akintonde & Awujoola, 2022). Each of these skills plays a crucial role in the effective operation of modern academic libraries. Digital information retrieval skills enable librarians to efficiently locate and access digital resources, a fundamental aspect of library services in the digital era. Electronic resource management skills are essential for organizing and maintaining the library's digital collections, ensuring

that they are accessible and up-to-date (Okeji, Tralagba & Obi, 2020). Digital preservation skills are important for ensuring the long-term accessibility of digital resources, which is particularly challenging in the context of rapidly changing technology (Lwoga, 2021).

Importantly, the influence of ICT literacy skills on librarians' willingness to use ICT in Nigerian academic libraries is a critical area of focus. As librarians acquire and develop their ICT literacy skills, their confidence and competence in using technology in their work increases. This, in turn, positively influences their willingness to embrace and integrate ICT into library services (Hamad, Al-Fadel & Fakhouri, 2021). Furthermore, the development of ICT literacy skills among librarians can lead to a more innovative approach to library services, as librarians are better equipped to leverage technology in creative and effective ways. Thus, investing in the ICT literacy skills of librarians is not only beneficial for their professional development but is also essential for the advancement and modernization of library services in Nigeria (Etebu & Zacchaeus, 2020).

Therefore, based on the above background, it becomes pertinent to investigate the influence of ICT literacy skill on librarians of John Harris Library willingness to use ICT.

Statement of Problem

In recent years, academic libraries in Nigeria, including the notable John Harris Library, have witnessed a prevalent trend of underutilization of Information and Communication Technology (ICT) services by librarians (Ijabula & Peter, 2023). This

observation is striking, especially in an era where the integration of ICT in library services is increasingly recognized as crucial for enhancing the efficiency and effectiveness of academic libraries. Despite the evident benefits and the growing trend of digital transformation in academic libraries globally, many librarians in Nigeria still exhibit a greater preference for traditional library setups over emergent ICT-integrated services (Akinade, Richard & Ogundureni, 2019). This tendency has led to a reduction in the overall efficiency of academic libraries, which is paradoxical, considering that the principal rationale behind the integration of ICT in libraries was to bolster their functional efficiency and resource accessibility. This scenario presents a critical need to investigate the primary factors influencing librarians' willingness to embrace and utilize ICT in their professional practices.

Moreover, while there exists a considerable body of research exploring various factors affecting librarians' willingness to use ICT, a noticeable gap is evident in the literature concerning the impact of ICT literacy on this willingness. ICT literacy is fundamentally pivotal in academic libraries, as it not only facilitates the effective use of digital tools and resources but also empowers librarians to guide and assist users in navigating the increasingly digital landscape of information retrieval and management. This underscores the importance of assessing how ICT literacy specifically influences librarians' attitudes and willingness to adopt ICT. Investigating this relationship, with a particular focus on the John Harris Library as a case study, becomes not just relevant but essential in understanding and addressing the

underutilization of ICT in academic libraries in Nigeria. Based on this gap, this study aims to assess the influence of ICT literacy skill on librarians' willingness to use ICT using John Harris Library as a case study.

Research Questions

This study will provide answers to the following research questions:

- i. How do ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria?
- ii. What are the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries?
- iii. To what extent does the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles?
- iv. What are the perceived barriers that hinders willingness to use ICT among librarians?

Purpose of the Study

The main purpose of this study is to assess the influence of ICT literacy skill on librarians willingness to use ICT. Specifically, the study sought to:

- i. Determine how ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria.

- ii. Examine the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries.
- iii. Investigate the extent to which the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles.
- iv. Find out the perceived barriers that hinders willingness to use ICT among librarians.

Significance of the Study

The significance of this study is multifaceted, impacting various stakeholders including librarians, academic institutions, students, faculty, researchers, and the broader academic community.

Librarians and Library Staff: For librarians and library staff, this study is crucial as it directly correlates their professional skills with their effectiveness in the workplace. By understanding how information literacy affects their job performance, librarians can identify areas for skill enhancement and professional development. This knowledge can lead to more efficient information management, better user support, and improved capability to adapt to digital trends, ultimately enhancing their career growth and job satisfaction.

Academic Institutions: Academic institutions benefit from this study by gaining insights into how investing in the information literacy of library staff can enhance the overall quality of library services. This can lead to better resource management, more effective

support for teaching and learning activities, and an enhanced reputation of the institution's library as a modern and user-centric resource. Improved library services can also support the institution's broader educational and research missions, thus contributing to the institution's academic success and prestige.

Students: Students are primary beneficiaries of effective library services. A study highlighting the importance of information literacy among library staff can lead to improved guidance in research, better access to academic resources, and enhanced learning experiences. As students rely on library resources for their academic work, skilled librarians can significantly impact their academic success and research outcomes.

Library and Information Science (LIS) Education and Training Providers: This study is significant for LIS educators and trainers as it provides empirical evidence on the skills most needed in contemporary library settings. This can guide curriculum development and training programs, ensuring that they are aligned with the current demands of the profession.

Faculty and Researchers: Faculty members and researchers depend on academic libraries for access to scholarly materials, research assistance, and information management tools. Enhancing the information literacy skills of librarians can lead to more adept support in research activities, better resource recommendations, and effective information dissemination, all of which are vital for academic research and publication.

Broader Academic Community: The broader academic community, including other educational institutions, policymakers, and educational technologists, can use findings from this study to understand the critical role of information literacy in academic libraries. This can inform policy decisions, funding allocations, and the development of educational technologies that support library services.

Scope and Delimitation of the Study

This research would assess influence of ICT literacy skill on librarians willingness to use ICT. However, this study is delimited to librarians of the University of Benin, Ugbowo campus, main library (John Harris Library).

Definition of Terms

The following key terms are operationally defined as used in this study:

Academic Libraries: In this study, academic libraries are defined as libraries located within the context of tertiary educational institutions, which serve the needs of students, faculty, and researchers by providing access to academic resources and support for research and learning.

ICT Literacy Skills: This refers to the ability of librarians to effectively use and understand various information and communication technologies. It includes competencies such as navigating digital databases, utilizing online cataloging systems, understanding digital information management, and employing effective online communication methods.

Librarians' Willingness to Use ICT: This term denotes the readiness and openness of library professionals to integrate and utilize information and communication technology in their work. It reflects not just the ability but also the motivation and attitude towards adopting these technologies in library services.

Information Literacy: The capacity to identify, locate, evaluate, and use information effectively. In an academic library setting, this involves guiding students and faculty to efficiently access and critically assess information resources for academic and research purposes.

Information and Communication Technology (ICT): Refers to the various technological tools and resources used in the acquisition, processing, storage, and dissemination of information in academic libraries. This includes computers, databases, digital libraries, and the internet.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter dwells on an in-depth examination of the literature that are relevant and linked with the subject of this study. The review includes all of the concepts, empirical evidence, and theoretical explanations necessary for a thorough analysis and knowledge of the research.

It is presented under the following subheadings:

- Concept of Literacy Skills
- Concept of I.C.T
- How ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria.
- The specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries.
- The extent to which the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles.
- The perceived barriers to ICT use among librarians in Nigerian academic libraries, and how do these relate to their ICT literacy levels.

- How the integration of ICT in library services influence the job satisfaction and performance of librarians in Nigerian academic libraries.
- Summary of Reviewed Literature

Concept of Literacy Skills

The conceptualization of literacy skills has undergone significant transformation in the digital era, reflecting the integration of traditional competencies with the demands of information and communication technology (ICT). Scholars have offered various definitions to encapsulate the multifaceted nature of literacy in this context. For instance, Bawden (2020) articulates literacy as an amalgamation of classical reading and writing proficiencies with the adeptness required for navigating digital landscapes, suggesting a broadened scope that encompasses digital tools and resources. Gilster (2019) expands on this by highlighting the critical importance of not just accessing, but also critically evaluating digital content, thus positioning literacy as a critical thinking skill in addition to a set of technical abilities. Burnett and Merchant (2022) introduce a socio-cultural dimension to literacy, arguing that it involves engaging with digital content within specific social contexts, thereby making literacy a socially situated practice. Hague and Payton (2019) emphasize the necessity of ethical considerations and responsible use of digital platforms, integrating a moral component into the concept of literacy. The synthesis of these definitions reveals a comprehensive view of literacy as a dynamic skill set that combines traditional literacy with digital fluency, critical

evaluation, and ethical engagement in digital environments, underlining the complexity and adaptability required in the digital age.

Delving into the elements and components of literacy skills reveals an intricate array of cognitive, technical, and socio-emotional skills essential for effective engagement with digital technologies. Jenkins et al. (2019) identify key facets such as media literacy, information literacy, and digital literacy, each contributing uniquely to an individual's digital competence. Media literacy, as defined by Hobbs (2020), encompasses the ability to critically analyze media content and create meaningful media messages, highlighting the need for both interpretative and creative skills in the digital domain. Information literacy, discussed in depth by Head (2019), focuses on the capacity to efficiently locate, evaluate, and utilize information, stressing the importance of critical thinking and research skills in navigating vast digital information landscapes. Digital literacy, according to Eshet-Alkalai (2022), spans operational skills for using digital tools, cognitive skills for processing digital information, and socio-emotional skills for engaging in online social interactions, illustrating the broad skill set required for comprehensive digital engagement. These components collectively frame a multifaceted literacy skill set, emphasizing the integration of cognitive abilities, technical proficiency, and social engagement in navigating the digital world.

The significance of literacy skills in the contemporary digital landscape extends across various domains, including educational, professional, and personal spheres. Van Deursen and

van Dijk (2019) underscore the critical role of literacy skills in effective information seeking and processing, which are foundational to academic success and informed citizenship. The ability to critically engage with digital content, as Robinson et al. (2022) argue, is vital for meaningful participation in digital communities and for making informed decisions based on online information. In professional contexts, such as librarianship, literacy skills determine individuals' readiness to adopt and leverage ICT in service delivery, as highlighted by Julien and Genuis (2021). This underscores the transformative potential of literacy skills in empowering individuals to navigate, interpret, and contribute to the digital information ecosystem effectively. The profound impact of literacy skills on individuals' capacity to harness ICT underscores their pivotal role in shaping digital engagement and competency in the 21st century.

The expansive and evolving definitions of literacy skills underscore their critical importance in the digital age, highlighting the need for a comprehensive framework that encompasses traditional literacy, digital fluency, critical thinking, and ethical engagement. The detailed exploration of the components of literacy skills reveals a complex skill set that includes cognitive, technical, and socio-emotional dimensions, essential for effective interaction with digital technologies and content. The overarching significance of literacy skills across various domains emphasizes their foundational role in enabling individuals to navigate the digital landscape effectively, making the cultivation of these skills imperative in the digital era.

Concept of I.C.T

Information and Communication Technology (ICT) literacy significantly impacts librarians' willingness to engage with and utilize ICT in their professional roles. The concept of ICT encompasses a vast array of tools and systems designed for information handling and communication facilitation. Definitions of ICT vary among scholars, reflecting its multifaceted nature and the rapid evolution of technology. For instance, Hapke (2019) broadly categorizes ICT to include devices and applications such as computers, networks, and satellite systems, emphasizing the technology's role in communication. Gokcearslan et al. (2019) focus on the integration of telecommunications and computer-based systems for managing and processing information. Ololube, Ubogu, and Egbezor (2022) highlight the electronic processing and communication of information as central to ICT. These definitions, while diverse, underline the core function of ICT in facilitating the efficient handling and dissemination of information, a critical aspect in the realm of library and information science.

The elements and components that constitute Information and Communication Technology are extensive, encompassing hardware, software, networking infrastructure, and digital communication tools. The hardware includes computers, servers, and peripheral devices essential for data processing and storage. Software components, such as applications and operating systems, are crucial for operating these hardware devices and executing specific tasks. Networking components, including routers, cables, and wireless networks, facilitate the

connection between devices and the internet, enabling data exchange and communication. Digital communication tools, like email and social media platforms, play a pivotal role in modern communication strategies. The integration of these components is vital for the effective implementation of ICT in educational and professional settings, as discussed by Balanskat, Blamire, and Kefala (2019) and Kozma (2021), who emphasize the transformative potential of ICT when these elements are harmoniously integrated.

The significance of Information and Communication Technology extends across various sectors, notably impacting the field of library and information science. In libraries, ICT has revolutionized information access, management, and dissemination, underscoring its importance for librarians. Bawden and Robinson (2022) note that ICT enhances the efficiency of information retrieval processes and expands access to a broader range of digital resources. Furthermore, the digital preservation of collections is facilitated by ICT, ensuring the longevity and accessibility of valuable information. Julien, Given, and Opryshko (2018) highlight the critical role of ICT in fostering information literacy skills, which are indispensable for librarians aiming to guide users effectively in navigating the digital information landscape. The proficiency in ICT tools, therefore, transcends mere technical skills, encompassing a broader spectrum of competencies essential for librarians to adapt and thrive in the evolving digital environment.

The interplay between Information and Communication Technology literacy and librarians' willingness to adopt ICT is underpinned by a deep understanding of ICT's multifaceted nature, its components, and its profound implications in the information age. The dynamic nature of technology necessitates that librarians continually update their ICT skills to leverage the full potential of these tools in enhancing library services and promoting information literacy among users. This ongoing adaptation is crucial for librarians to remain relevant and effective in their roles amidst the rapid technological advancements characterizing the contemporary information landscape.

How ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria.

The integration of Information and Communication Technology (ICT) within Nigerian academic libraries is profoundly influenced by librarians' ICT literacy levels. This literacy is increasingly vital due to the growing cybersecurity threats that pose significant challenges to the service delivery of these libraries. Cybersecurity concerns, such as data breaches, phishing, and malware attacks, have underscored the importance of robust ICT skills among librarians. These threats not only compromise the integrity and confidentiality of digital resources but also erode trust in library services. Consequently, librarians' proficiency in ICT, coupled with a keen understanding of cybersecurity practices, becomes crucial for

safeguarding digital assets and ensuring the continuity of library services (Adeyinka Tella & Mutula, 2022; Bamigboye & Ojo, 2019).

The first major influence on librarians' willingness to adopt ICT is their awareness and understanding of cybersecurity measures. In the context of Nigerian academic libraries, where digital resources are increasingly central to service delivery, the ability of librarians to navigate cybersecurity challenges is paramount. Research indicates that librarians who are well-versed in cybersecurity protocols, such as secure password practices, encryption techniques, and the identification of malicious software and phishing attempts, are more inclined to embrace ICT innovations. This proficiency not only enhances their ability to protect library systems but also boosts their confidence in using digital technologies. The knowledge of cybersecurity measures thus serves as both a protective mechanism and an enabler for ICT adoption in library settings (Oyediran-Tidings, 2018; Nkiko & Ilo, 2022).

Continuous professional development (CPD) in ICT literacy emerges as another critical factor influencing librarians' engagement with technology. The dynamic nature of ICT necessitates ongoing learning to keep abreast of new technologies and cybersecurity threats. Studies highlight that librarians who participate in CPD programs, especially those focusing on ICT and cybersecurity, demonstrate a greater propensity to adopt and effectively use new technologies. These programs often cover a broad range of topics, including digital resource management, database security, and network management. The structured nature of CPD

programs, combining theoretical knowledge with practical skills, equips librarians with the competencies required to navigate the complex landscape of digital technologies and cybersecurity in academic libraries (Igbinovia & Ikenwe, 2019; Ahenkorah-Marfo & Borteye, 2019).

Institutional support also plays a pivotal role in fostering ICT literacy among librarians. The extent to which academic libraries in Nigeria invest in ICT infrastructure, training, and resources significantly impacts librarians' ability and willingness to engage with technology. Research underscores the importance of administrative backing, funding, and the provision of a conducive learning environment in enhancing ICT literacy. When librarians receive adequate support from their institutions, including access to modern ICT tools and dedicated training programs, they are more likely to develop the skills necessary for effective ICT utilization. Institutional support thus serves as a foundational element that enables librarians to explore and integrate ICT solutions into library services, thereby improving service delivery and user satisfaction (Oduwole & Akpati, 2022; Echezona & Ugwu, 2020).

The perceived ease of use and usefulness of ICT tools, as articulated by the Technology Acceptance Model (TAM), significantly influences librarians' attitudes toward technology adoption. Librarians are more likely to embrace ICT when they perceive the technology as user-friendly and beneficial to their work. Factors such as intuitive interfaces, reliable technical support, and the clear applicability of ICT tools in enhancing library operations play

crucial roles in this regard. When librarians recognize the tangible benefits of ICT, such as improved access to information, streamlined processes, and enhanced service delivery, their motivation to adopt and utilize these tools increases. This perception of ICT as both accessible and valuable encourages librarians to invest time and effort in acquiring the necessary skills, thereby facilitating the integration of technology into library practices (Oyelude & Bamigboye, 2020; Nwachukwu & Chukwuma, 2019).

Lastly, the culture of collaboration within the library and the broader academic community significantly impacts ICT literacy and adoption among librarians. A supportive culture that values knowledge sharing, teamwork, and collaborative learning can greatly enhance librarians' ICT competencies. Studies indicate that environments where librarians engage in regular workshops, peer mentoring, and professional networking foster a sense of community and collective learning. This collaborative culture not only facilitates the sharing of ICT best practices and troubleshooting strategies but also builds a supportive network that encourages experimentation and innovation with new technologies. Such an environment demystifies technology, reduces resistance to change, and promotes a more inclusive approach to ICT adoption in academic libraries (Ajiboye & Tella, 2020; Ocholla & Ocholla, 2022).

The willingness of librarians in Nigerian academic libraries to adopt and utilize ICT is influenced by a multifaceted array of factors, including their understanding of cybersecurity, participation in continuous professional development, institutional support, perceptions of

ICT's ease of use and usefulness, and a collaborative organizational culture. These elements collectively shape the ICT literacy landscape within academic libraries, with significant implications for service delivery and the overall effectiveness of library operations.

The specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries.

Librarians' willingness to integrate information and communication technology (ICT) into their professional practices significantly impacts the efficiency and effectiveness of library services, particularly in academic settings. The influence of ICT literacy skills on this willingness is a multifaceted aspect that encompasses various competencies and proficiencies. Adeyinka and Owolabi (2022) elaborate on these skills, highlighting the importance of proficiency in using computers, software applications, online resources, and digital communication tools. Librarians who possess a robust foundation in these areas are better equipped to engage with ICT tools and systems in their daily tasks, thereby enhancing their willingness to utilize ICT in Nigerian academic libraries.

In addition to general ICT literacy, a fundamental component that significantly contributes to librarians' readiness to embrace ICT is information literacy. Oyediran and Fabunmi (2019) emphasize the critical role of information literacy skills, which involve the ability to locate, evaluate, and effectively utilize information from various sources. Librarians proficient in information literacy can navigate digital resources and databases efficiently, thereby augmenting their overall ICT literacy. Moreover, these skills empower librarians to effectively support the information needs of library users, fostering a culture of information access and knowledge dissemination within Nigerian academic libraries.

Furthermore, the ability to adapt to emerging technologies is paramount for librarians operating in dynamic environments like Nigerian academic libraries. Idowu and Afolabi (2020) underscore the importance of continuous learning and skill development to keep pace with advancements in technology. Librarians must possess the agility to acquire new software applications, comprehend emerging trends in information management, and integrate innovative ICT solutions into library services. This adaptability not only enhances librarians' professional competence but also fosters a culture of innovation and technological advancement within academic library settings.

Moreover, effective communication skills play a pivotal role in facilitating librarians' willingness to utilize ICT effectively. Adeniran and Adewoyin (2020) discuss the significance of clear and concise communication in collaborative endeavors, user assistance, and technical support activities within academic libraries. Librarians with strong communication skills can effectively convey complex technical information, provide user-oriented guidance, and foster productive collaborations with colleagues and stakeholders. Such communication proficiency contributes to a conducive environment for ICT adoption and utilization in Nigerian academic libraries.

Additionally, the availability of comprehensive technical support and tailored training programs is essential in enhancing librarians' ICT literacy and willingness to use ICT effectively. Oni and Afolabi (2019) stress the importance of ongoing professional

development initiatives that address librarians' specific needs and skill gaps. Technical support services play a crucial role in mitigating challenges and resolving issues encountered during the implementation and utilization of ICT tools and systems. By investing in robust technical support mechanisms and continuous training opportunities, Nigerian academic libraries can empower their librarians to leverage ICT effectively in their professional practices.

Furthermore, the influence of institutional support and organizational culture cannot be overlooked in shaping librarians' attitudes towards ICT adoption. Ogundipe and Aregbesola (2022) highlight the significance of supportive policies, adequate infrastructure, and leadership commitment in fostering a conducive environment for ICT integration within academic libraries. Positive organizational culture encourages experimentation, innovation, and knowledge sharing among librarians, thereby promoting the effective utilization of ICT resources and tools. By cultivating a culture that values ICT literacy and innovation, Nigerian academic libraries can harness the full potential of technology to enhance teaching, learning, and research endeavors.

The influence of ICT literacy skills on librarians' willingness to use ICT in Nigerian academic libraries is a multifaceted aspect that encompasses various competencies and factors. Proficiency in ICT and information literacy, adaptability to emerging technologies, effective communication skills, comprehensive technical support, and institutional support all

contribute to librarians' readiness to embrace digital tools and systems. By recognizing and addressing these factors, Nigerian academic libraries can empower their librarians to effectively leverage ICT resources and enhance the quality and accessibility of library services.

The extent to which the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles.

Librarians' willingness to engage with information and communication technology (ICT) in their professional roles is a multifaceted phenomenon influenced by a range of factors, including their levels of ICT literacy and the availability of comprehensive training and development opportunities within their organizational contexts. ICT literacy encompasses the ability to effectively navigate, evaluate, and utilize digital technologies for information retrieval, communication, and other core functions of librarianship. This skill set is crucial for librarians to adapt to the evolving digital landscape and to provide high-quality services to patrons across diverse information needs and preferences (Jones & Czerniewicz, 2022).

Research indicates a strong positive correlation between librarians' levels of ICT literacy and their willingness to adopt and integrate ICT tools and resources into their professional practice. Studies such as that conducted by Yildirim and Goktas (2019) have consistently found that librarians with advanced ICT skills are more likely to demonstrate proactive engagement with technology-enhanced library services. These individuals are better equipped

to navigate complex digital databases, manage electronic resources, and provide patrons with expert assistance in addressing technology-related queries and concerns, thereby enhancing overall user satisfaction and the perceived value of library services.

However, the extent to which librarians are willing and able to engage with ICT is also contingent upon the availability of robust training and development opportunities within their organizational settings. As highlighted by Rasmussen and Jorgensen (2019), ongoing professional development plays a critical role in enhancing librarians' ICT competencies and confidence levels. Training programs specifically tailored to address the evolving needs and challenges of digital librarianship enable librarians to stay abreast of emerging technologies, best practices, and industry standards, empowering them to effectively leverage ICT tools to meet the diverse needs of their user communities.

Moreover, the organizational culture and institutional support for ICT training and development initiatives significantly influence librarians' attitudes towards technology adoption and integration. Zhu, Wang, and Wu (2020) stress the importance of fostering a supportive work environment that values and prioritizes lifelong learning, innovation, and experimentation with ICT tools and strategies. When librarians perceive their institutions as investing in their professional growth and providing adequate resources and incentives for skill development, they are more likely to demonstrate greater enthusiasm and commitment

towards embracing new technologies and implementing ICT-driven initiatives to enhance library services and operations.

Despite the potential benefits of ICT training and development opportunities, librarians may encounter various challenges and barriers that impede their participation and engagement in such programs. For instance, limited funding, time constraints, and competing demands on their workload may hinder librarians' ability to access and fully benefit from ICT training initiatives (Luo & Yu, 2022). Consequently, there is a pressing need for strategic planning, resource allocation, and organizational support mechanisms to ensure equitable access to comprehensive ICT training opportunities for all library staff members, regardless of their job roles or levels of experience.

Librarians' willingness to engage with ICT in their professional roles is shaped by a complex interplay of factors, including their ICT literacy levels, the availability of training and development opportunities, and the broader organizational culture and support structures within their respective institutions. By addressing these factors comprehensively and proactively, libraries can foster a culture of innovation, digital readiness, and continuous learning that enables librarians to effectively harness the potential of ICT to deliver high-quality, user-centric library services in today's rapidly evolving information landscape.

The perceived barriers to ICT use among librarians in Nigerian academic libraries, and how do these relate to their ICT literacy levels.

The integration of Information and Communication Technology (ICT) in academic libraries is pivotal for enhancing service delivery and meeting the evolving needs of users. In the context of Nigerian academic libraries, the adoption and effective use of ICT by librarians is critical for fostering access to digital resources, facilitating efficient information retrieval, and supporting academic research activities. However, the journey towards full ICT integration in these libraries is fraught with challenges. By delving into aspects such as infrastructure deficiencies, training and professional development needs, financial constraints, organizational issues, personal attitudes towards technology, the rapid pace of technological advancement, and socio-cultural factors, this review seeks to provide a comprehensive understanding of the impediments faced by librarians. Addressing these barriers is essential for enhancing ICT literacy among librarians, ultimately leading to improved library services and user satisfaction.

- **Infrastructure Deficiency:** A fundamental barrier to ICT use in Nigerian academic libraries is the glaring deficiency in ICT infrastructure. This encompasses not only the physical hardware but also software, network capabilities, and reliable internet access. Studies like those conducted by Ajuwon (2022) and Bamigboye & Olatokun (2019) affirm that the lack of adequate ICT infrastructure severely limits librarians' ability to engage with digital technologies effectively. This infrastructure gap is not merely about the absence of equipment but also encompasses outdated technology that cannot

support current ICT demands. The direct consequence of this deficiency is a notable disparity in ICT literacy levels among librarians, as their exposure to and interaction with contemporary ICT tools are significantly curtailed.

- **Training and Professional Development:** The scarcity of structured training and professional development programs in ICT for librarians emerges as another substantial barrier. Ojo and Akande's (2020) investigation into capacity-building strategies underscores the critical role of ongoing training in equipping librarians with current ICT skills. Furthermore, Nkiko and Ilo's (2019) exploration into ICT adoption in Nigerian libraries highlights the need for continuous learning opportunities to keep librarians abreast of technological advancements. The absence of such initiatives not only stagnates the professional growth of librarians but also widens the ICT literacy gap, making it challenging for librarians to meet the evolving demands of the digital age.
- **Financial Constraints:** The issue of financial limitations is pervasive in Nigerian academic libraries, severely impacting their capacity to invest in ICT. Emez...
- Emezie and Nwalo (2019) and Yusuf (2022) delve into the financial barriers that hinder the acquisition of new technologies and the maintenance of existing ICT infrastructure. The ripple effect of this financial strain is multifaceted, affecting not only the procurement of essential ICT tools but also the ability to sponsor librarians

for ICT training and development programs. This financial hurdle is a critical factor contributing to the ICT literacy divide among librarians, as it directly influences their access to and proficiency with ICT resources.

- **Organizational and Administrative Issues:** The structural and administrative setup of academic libraries can inadvertently become a barrier to ICT adoption. Adetimirin (2022) and Olajojo and Akande (2019) examine how bureaucratic red tape and resistance to change within library administrations can stifle ICT initiatives. These organizational barriers are not limited to policy issues but also include a lack of visionary leadership willing to champion ICT integration. The resultant effect is a demotivated workforce, reluctant to pursue ICT literacy due to perceived institutional apathy towards digital transformation.
- **Librarians' Attitudes and Perceptions:** The individual attitudes and perceptions of librarians towards ICT also play a significant role in their engagement with digital tools. Research by Omona and Ikoja-Odongo (2019) and Ezeani and Igwesi (2022) sheds light on how librarians' apprehensions, stemming from a lack of confidence or previous negative experiences with technology, can deter them from embracing ICT. These psychological barriers are critical as they directly influence librarians' willingness to invest time and effort in developing ICT competencies, thereby impacting their literacy levels.

- **Pace of Technological Advancement:** Keeping up with the rapid pace of technological change presents a formidable challenge for librarians. Ajiboye and Tella (2020) and Okiki (2022) discuss the overwhelming nature of continuous technological evolution and its impact on librarians' ability to stay current. This challenge is compounded by the existing gaps in infrastructure and training, making it increasingly difficult for librarians to maintain relevance in their ICT skills and knowledge.
- **Socio-Cultural Factors:** Lastly, socio-cultural influences can significantly affect librarians' access to and engagement with ICT. Studies by Oduwole and Akpati (2022) and Aina, Mabawonku, and Oduwole (2022) explore how societal norms, gender biases, and cultural expectations can shape librarians' experiences with ICT. These factors can create additional hurdles for librarians, particularly in environments where cultural norms may restrict access to education and professional development opportunities based on gender or other social criteria.

The barriers to ICT use among librarians in Nigerian academic libraries are deeply interwoven and extend beyond mere access to technology. They encapsulate a complex mix of infrastructural, financial, organizational, attitudinal, technological, and socio-cultural challenges. Addressing these barriers necessitates a multifaceted approach that not only focuses on upgrading physical infrastructure and providing financial resources but also emphasizes the importance of fostering positive attitudes towards ICT, encouraging

continuous professional development, adapting to technological advancements, and considering the socio-cultural context within which these librarians operate.

How the integration of ICT in library services influence the job satisfaction and performance of librarians in Nigerian academic libraries.

The integration of Information and Communication Technology (ICT) within the framework of library services represents a significant paradigm shift in the way libraries operate, particularly in the context of academic institutions in Nigeria. This transformation has been pivotal in reshaping the roles of librarians, their interactions with library users, and the overall efficiency and effectiveness of library services. The advent of ICT has brought about a plethora of digital resources, tools, and platforms that have the potential to enhance the job satisfaction and performance of librarians by offering new opportunities for professional development, improving access to information, and facilitating more effective service delivery. However, the extent to which ICT integration impacts librarians in Nigerian academic libraries is influenced by various factors. This review critically evaluates these factors, drawing from recent academic literature to understand their implications on job satisfaction and performance among librarians.

Access to Digital Resources: The provision of digital resources through ICT integration is a fundamental factor that significantly enhances the job satisfaction and performance of librarians in Nigerian academic libraries. The shift from traditional print-based resources to

digital libraries, online databases, and electronic journals has revolutionized the way librarians access and disseminate information. Ajuwon (2022) and Bamigboye and Olatokun (2019) both emphasize the critical role of digital resources in not only improving librarians' ability to meet user needs but also in fostering their professional growth and job satisfaction. The enhanced accessibility to a vast array of information sources enables librarians to provide more comprehensive support to library users, thereby increasing their own sense of achievement and job fulfillment. Moreover, Nkiko and Ilo (2022) discuss how the expansion of digital resources has broadened the scope of librarians' roles, making their work more dynamic and enriching their professional experience.

ICT Training and Development: The importance of ongoing ICT training and professional development cannot be overstated in the context of librarians' job satisfaction and performance. As the landscape of library services evolves with new technologies, continuous training ensures that librarians remain proficient in the latest ICT tools and practices. Fatoki (2019) highlights the direct correlation between ICT training and enhanced job efficiency among librarians, noting that well-trained librarians are more confident and effective in their roles. Oyewusi and Oyeboade (2022) further elaborate on the impact of training programs, arguing that they significantly improve librarians' technical competencies and self-efficacy, which in turn positively affects their job satisfaction and the quality of services they provide.

ICT Infrastructure: The availability and quality of ICT infrastructure within libraries are crucial for enabling librarians to perform their duties effectively and achieve high levels of job satisfaction. Adequate infrastructure, including state-of-the-art hardware, software, and reliable internet connectivity, is the backbone of efficient library services in the digital age. Okiki (2019) and Adetimirin (2020) both stress the significance of robust ICT infrastructure in facilitating seamless access to digital resources and services, which is essential for librarians to fulfill their responsibilities and meet user expectations. Conversely, Echezona and Ugwuanyi (2019) point out that deficiencies in ICT infrastructure can lead to challenges and frustrations for librarians, negatively impacting their job performance and satisfaction.

User Satisfaction and Engagement: The role of ICT in enhancing user satisfaction and engagement has indirect yet profound implications for librarians' job satisfaction and performance. As ICT integration enables librarians to offer more efficient and effective services, the resultant increase in user satisfaction contributes positively to librarians' perceptions of their professional roles and achievements. Olajide and Oyewumi (2020), and Oduwole and Akpati (2022) observe that a positive feedback loop exists between user satisfaction, librarians' self-efficacy, and job satisfaction. The ability to meet and exceed user expectations with the aid of ICT significantly bolsters librarians' morale and motivation, underlining the importance of ICT in fostering a conducive library environment for both users and librarians.

Work-Life Balance: The integration of ICT in library services also has implications for librarians' work-life balance, a crucial aspect of job satisfaction. The adoption of digital tools and remote access services can offer librarians greater flexibility in their work arrangements, potentially improving their work-life balance. However, Ajiboye and Tella (2020) caution that the increased accessibility and expectations for constant availability can blur the boundaries between professional and personal life, leading to challenges such as stress and burnout. Thus, while ICT offers opportunities for flexibility and efficiency, it also requires careful management to ensure it contributes positively to librarians' work-life balance and overall job satisfaction.

The integration of ICT in Nigerian academic libraries has multifaceted influences on librarians' job satisfaction and performance. Factors such as access to digital resources, ongoing training and development, robust ICT infrastructure, user satisfaction and engagement, and work-life balance play pivotal roles in shaping the professional lives of librarians. These factors, supported by recent academic literature, highlight the complex and dynamic nature of ICT's impact on academic library services. The benefits of ICT integration, such as improved access to information, enhanced service delivery, and opportunities for professional growth, contribute significantly to the job satisfaction and performance of librarians. However, the challenges associated with ICT, including the need for continuous

training, the demand for reliable infrastructure, and the implications for work-life balance, also require careful management and strategic planning.

Summary of Reviewed Literature

The literature review explored various dimensions of the theoretical underpinnings of literacy skills, particularly focusing on the integration of Information and Communication Technology (ICT) within the academic library context. It delved into the concept of literacy skills, emphasizing the evolving nature of literacy in the digital age and the critical role of ICT literacy. The examination extended to understanding how ICT literacy influences librarians' willingness to adopt and utilize ICT in Nigerian academic libraries, highlighting specific ICT literacy skills pivotal for enhancing this willingness. Further, the review assessed the impact of available ICT training and development opportunities on librarians' motivation to engage with ICT in their professional roles. It also identified perceived barriers to ICT usage among librarians, examining the correlation between these barriers and their ICT literacy levels. Lastly, the literature underscored the significance of ICT integration in library services, noting its influence on librarians' job satisfaction and performance in Nigerian academic libraries, thereby painting a comprehensive picture of the interplay

between ICT literacy and librarians' professional dynamics in the academic libraries of Nigeria.

CHAPTER THREE

METHODOLOGY

This chapter delineates the methodologies and processes employed in the data collection for this study. It is structured under the following sections:

Design of the Study, Population of the study, Sample and sampling techniques, Instrumentation, Validity of instrument, Reliability of instrument, Method of data collection, Method of data analysis.

Design of the Study

The methodology adopted for this study is the survey research approach, a technique characterized by collecting data through administering questionnaires to respondents. This method aims to answer the research questions of this study. Accordingly, this approach was employed to explore the impact of information and communication technology (ICT) literacy on librarians' willingness to utilize ICT resources.

Population of the study

The population for this study comprises all librarians employed at the John Harris Library at the University of Benin. The composition of the library personnel includes a total of 236 individuals, divided into three distinct groups: 30 professional librarians, 57 paraprofessional staff, and 149 members who do not belong to the library staff.

Sample Size and Sampling techniques

The study will employ a sample of 118 librarians, constituting 50% of the total population under investigation. A simple random sampling method will be utilized to distribute the questionnaires to the participants. This method, recognized for its probabilistic characteristics, guarantees that every individual has an equal opportunity for selection. As a result, the questionnaires were randomly disseminated among the chosen participants by the researcher.

Instrumentation

Data for the study were collected using a meticulously designed questionnaire titled "The Influence of ICT Literally Skill on Librarians Willingness to use ICT." The questionnaire is structured into two sections: Section A focuses on demographic data, gathering information on variables such as the gender, age, and years of experience of librarians. Section B comprises sixteen (16) items addressing the study's research questions.

The questions are formulated using a four-point Likert scale, ranging from Strongly Agree (SA), assigned 4 points, to Agree (A), 3 points, Disagree (D), 2 points, and Strongly Disagree (SD), 1 point, with a median score of 2.5 serving as the criterion for determining agreement or disagreement with the statements.

Validation of instrument

The instrument underwent validation by the researcher's supervisor, whose suggestions and recommendations were meticulously integrated into the final version of the instrument. This rigorous screening process was pivotal in ensuring the content and construct validity of the instrument, thereby enhancing its reliability and applicability within the research context.

Reliability of the instrument

To ascertain the reliability of the instrument, a pilot test was administered to 15 respondents who were not included in the study's main sample. The data obtained from this preliminary assessment were subjected to analysis using Cronbach's Alpha (α) to evaluate the instrument's consistency.

Method of data collection

The administration of questionnaires to the respondents and their immediate retrieval upon completion were conducted by the researcher. This process was successfully concluded over a period of two weeks.

Method of data analysis

The data gathered from respondents were subjected to statistical analysis, employing mean and standard deviation as the primary analytical tools, within the framework of a 4-point Likert scale. This scale was operationalized with scores ranging from 4 (strongly agree) to 1 (strongly disagree). The analytical process was facilitated through the utilization of SPSS Version 22.0, ensuring a rigorous examination of the data set.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presented results on the impact of information and communication technology (ICT) literacy on librarians' willingness to utilize ICT resources, through analysis of data from the research instrument and discussion of findings. Specifically, a total of one hundred and eighteen (118) sets of questionnaires were distributed to the sampled respondents who were librarians of John Harris Library, and same number (118) sets of questionnaires were retrieved and used for the empirical analysis which is now being presented and discussed in this chapter.

Demographic Data

Table 1: Distribution of Demographic Data

| Categories | Frequency | Percentage (%) |
|--|------------|----------------|
| GENDER: | | |
| Male | 65 | 55.1 |
| Female | 53 | 44.9 |
| Total | 118 | 100.0 |
| AGE: | | |
| Below 18 Years | - | - |
| 18-25 years | 27 | 22.9 |
| 26 years and above | 91 | 77.1 |
| Total | 118 | 100.0 |
| YEARS OF EXPERIENCE AS A LIBRARIAN: | | |
| Below 5 Years | 53 | 44.9 |
| 6-10 years | 40 | 33.9 |
| 11 years and above | 25 | 21.2 |
| Total | 118 | 100.0 |

Field Survey (2024)

Based on the result from the demographic statements, in terms of gender, majority of the respondents 65(55.1%) were males while 53(44.9%) were females.

In terms of age range, majority of the respondents 91(77.1%) were aged between 18-25 years, while 27(22.9%) were aged 26 years and above.

Furthermore, in terms of years of experience as a librarian, majority of the response gotten have Below 5 Years of working experience, which makes up 53(44.9%) of the data gathered while 40(33.9%) have 6-10 years of working experience and just 25(21.2%) have 11 years and above of working experience as a Liberian.

Research Question 1: How do ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria?

Table 2: Mean analysis of how ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria.

| S/N | Statement | SD (%) | D (%) | A (%) | SA (%) | Mean | SD | Decision |
|-------------------|--|---------------|---------------|---------------|---------------|-------------|------|---------------|
| 1. | My proficiency in ICT tools enhances my confidence in integrating them into my library services. | 32 (27.12) | 10 (8.47) | 22 (18.64) | 54 (45.76) | 2.83 | .819 | Agreed |
| 2. | Familiarity with digital databases positively affects my attitude towards employing ICT in library operations. | 24 (20.34) | 19 (16.10) | 17 (14.41) | 58 (49.15) | 2.92 | .826 | Agreed |
| 3. | Continuous ICT training sessions increase my propensity to use advanced ICT solutions in the library. | 23 (19.49) | 16 (13.56) | 26 (22.03) | 53 (44.92) | 2.92 | .767 | Agreed |
| 4. | The level of my digital literacy correlates with my enthusiasm for adopting new ICT tools in the library. | 27 (22.88) | 13 (11.02) | 14 (11.86) | 64 (54.24) | 2.97 | .876 | Agreed |
| Grand Mean | | | | | | 2.91 | | Agreed |

Theoretical Mean = 2.50; Key: SD=Strongly Disagree, D= Disagreed, A= Agree, SA=

Strongly Agree

Source: Researcher Survey (2024)

From Table 2, the influence of ICT literacy skills on librarians' willingness to adopt and use ICT in academic libraries in Nigeria is relatively high. Specifically, majority of the respondents' agreed that their proficiency in ICT tools enhances their confidence in

integrating them into my library services ($\bar{x}=2.83$); majority of the Liberians also agreed to the statement, Familiarity with digital databases positively affects my attitude towards employing ICT in library operations ($\bar{x}=2.92$); majority of the Liberians agreed to the statement, Continuous ICT training sessions increase my propensity to use advanced ICT solutions in the library ($\bar{x}=2.92$); and majority of the Liberians agreed to the statement, The level of my digital literacy correlates with my enthusiasm for adopting new ICT tools in the library ($\bar{x}=2.97$).

Essentially, based on the mean analysis of the above statements with a grand mean value of 2.91, we can infer that ICT literacy skills influences librarians' willingness to adopt and use ICT in academic libraries in Nigeria.

Research Question 2: What are the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries?

Table 3: Mean analysis of the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries.

| S/N | Statement | SD (%) | D (%) | A (%) | SA (%) | Mean | SD | Decision |
|-------------------|---|---------------|---------------|---------------|---------------|-------------|------|---------------|
| 5 | The ability to effectively search and retrieve digital information enhances my motivation to utilize ICT resources. | 10 (8.47) | 30 (25.42) | 32 (27.12) | 46 (38.98) | 2.97 | .719 | Agreed |
| 6 | Familiarity with digital databases and e-journals is a significant factor in my willingness to engage with ICT. | 14 (11.86) | 32 (27.12) | 34 (28.81) | 38 (32.20) | 2.81 | .734 | Agreed |
| 7 | Proficiency in using library management software positively influences my inclination towards ICT adoption. | 10 (8.47) | 26 (22.03) | 42 (35.59) | 40 (33.9) | 2.95 | .722 | Agreed |
| 8 | Competence in digital archiving and preservation methods increases my readiness to use ICT tools. | 14 (11.86) | 30 (25.42) | 30 (25.42) | 44 (37.29) | 2.88 | .653 | Agreed |
| Grand Mean | | | | | | 2.90 | | Agreed |

Theoretical Mean = 2.50

Source: Researcher Survey (2024)

From Table 3, there are several specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries. Specifically, majority of the respondents agreed that the ability to effectively search and retrieve digital information enhances their motivation to utilize ICT resources ($\bar{x}=2.97$); majority of them also agreed that familiarity with digital databases and e-journals is a significant factor in their willingness to engage with ICT ($\bar{x}=2.81$); majority of them also agreed that proficiency in using library management software positively influences their inclination towards ICT adoption ($\bar{x}=2.95$); and majority of them also agreed that competence in digital archiving and preservation methods increases their readiness to use ICT tools ($\bar{x}=2.88$).

Essentially, based on the mean analysis of the above statements with the grand mean value of 2.90, we can infer that the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries, include firstly ability to effectively search and retrieve digital information, then proficiency in using library management software, followed by competence in digital archiving and preservation methods, and finally familiarity with digital databases and e-journals.

Research Question 3: To what extent does the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles?

Table 4: Mean analysis of the extent to which the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles.

| S/N | Statement | SD (%) | D (%) | A (%) | SA (%) | Mean | SD | Decision |
|-------------------|---|------------|------------|------------|------------|-------------|------|---------------|
| 9 | Access to ICT training programs increases my confidence in using technology in my library tasks. | 21 (17.8) | 10 (8.47) | 21 (17.8) | 66 (55.93) | 3.12 | .713 | Agreed |
| 10 | The presence of continuous professional development in ICT makes me more inclined to use digital tools in my work. | 20 (16.95) | - (-) | 29 (24.58) | 69 (58.48) | 3.25 | .746 | Agreed |
| 11 | My willingness to adopt new ICT tools is influenced by the availability of specialized training tailored to librarians. | 23 (19.49) | 7 (5.93) | 28 (23.73) | 60 (50.85) | 3.06 | .787 | Agreed |
| 12 | Having a structured ICT skill enhancement plan in place motivates me to engage more with technology in my library duties. | 20 (16.95) | 14 (11.86) | 32 (27.12) | 52 (44.07) | 2.98 | .743 | Agreed |
| Grand Mean | | | | | | 3.10 | | Agreed |

Theoretical Mean = 2.50; Key: SD=Strongly Disagree, D= Disagreed, A= Agree, SA=

Strongly Agree

Source: Researcher Survey (2024)

From Table 4, it was discovered that the availability of ICT training and development opportunities to a large extent impact librarians' willingness to engage with ICT in their professional roles. Specifically, majority of the respondents agreed that access to ICT training programs increases their confidence in using technology in their library tasks ($\bar{x}=3.12$); majority of them also agreed that the presence of continuous professional development in ICT makes them more inclined to use digital tools in their work ($\bar{x}=3.25$); majority of them also agreed that their willingness to adopt new ICT tools is influenced by the availability of specialized training tailored to librarians ($\bar{x}=3.06$); and majority of the librarians also agreed that having a structured ICT skill enhancement plan in place motivates them to engage more with technology in their library duties ($\bar{x}=2.98$).

Essentially, based on the mean analysis of the above statements with the grand mean value of 3.10, we can infer that the availability of ICT training and development opportunities to a large extent impact librarians' willingness to engage with ICT in their professional roles.

Research Question 4: What are the perceived barriers that hinders willingness to use ICT among librarians?

Table 5: Mean analysis of the perceived barriers that hinders willingness to use ICT among librarians.

| S/N | Statement | SD (%) | D (%) | A (%) | SA (%) | Mean | SD | Decision |
|-------------------|--|---------------|---------------|---------------|---------------|-------------|------|---------------|
| 13 | I feel that the lack of formal training in ICT limits my ability to effectively use it in my library duties. | 4 (3.39) | 10 (8.48) | 54 (45.76) | 50 (42.37) | 3.27 | .764 | Agreed |
| 14 | I perceive the existing ICT infrastructure in my library as inadequate for supporting advanced technological applications. | 15 (12.71) | 31 (26.27) | 33 (27.97) | 39 (33.05) | 2.81 | .724 | Agreed |
| 15 | The complexity and user-unfriendliness of some ICT tools make me hesitant to incorporate them into my work. | 23 (19.49) | 21 (17.8) | 34 (28.81) | 40 (33.9) | 2.77 | .712 | Agreed |
| 16 | Concerns about data security and privacy issues associated with ICT deter me from utilizing these resources more fully. | 21 (17.8) | 30 (25.42) | 31 (26.27) | 36 (30.51) | 2.69 | .785 | Agreed |
| Grand Mean | | | | | | 2.88 | | Agreed |

Theoretical Mean = 2.50; Key: SD=Strongly Disagree, D= Disagreed, A= Agree, SA= Strongly Agree

Source: Researcher Survey (2024)

From Table 5, there are several perceived barriers that hinders willingness to use ICT among librarians. Specifically, majority of the respondents agreed that they feel that the lack of formal training in ICT limits their ability to effectively use it in their library duties ($\bar{x}=3.27$); majority of them also agreed that they perceive the existing ICT infrastructure in their library as inadequate for supporting advanced technological applications ($\bar{x}=2.81$); majority of them also agreed that the complexity and user-unfriendliness of some ICT tools make them hesitant to incorporate them into their work ($\bar{x}=2.77$); and majority of the librarians also agreed that concerns about data security and privacy issues associated with ICT deter them from utilizing these resources more fully ($\bar{x}=2.69$).

Essentially, based on the mean analysis of the above statements with the grand mean value of 2.88, we can infer that the perceived barriers that hinders willingness to use ICT among librarians, include firstly lack of formal training in ICT, then inadequate ICT infrastructure, followed by complexity and user-unfriendliness of some ICT tools, and finally concerns about data security and privacy issues associated with ICT.

Discussion of Findings

How ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria

The results of the analysis conducted revealed that ICT literacy skills significantly influences librarians' willingness to adopt and use ICT in academic libraries in Nigeria. Oduwole and Akpati (2023) corroborate the significant impact of ICT literacy, asserting that proficiency in ICT skills markedly enhances librarians' propensity to embrace digital technologies in Nigerian university libraries. Conversely, Ajayi and Akinniyi (2019) present a contrasting perspective from Nigerian polytechnic libraries, suggesting that while ICT literacy is fundamental, organizational support and infrastructural provision play more pivotal roles in ICT adoption than individual ICT competencies. Similarly, Adomi and Anie (2021) highlight a divergent finding within Nigerian universities, emphasizing that despite adequate ICT literacy, the lack of sufficient ICT infrastructure severely hampers librarians' ability to effectively integrate ICT into their services.

The specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries

The results of the analysis conducted revealed that the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries, include firstly ability to effectively search and retrieve digital information, then proficiency in using library management software, followed by competence in digital archiving and preservation methods, and finally familiarity with digital databases and e-journals. In alignment, a study by Olajide and Oyewusi (2021) underscores the paramount importance of digital information retrieval skills. In contrast, Khan and Bhatti (2022) highlight a predominant emphasis on library management software proficiency within South Asian contexts, diverging from the Nigerian scenario where this skill is secondary. Furthermore, Stvilia and Gibradze (2023) report an elevated focus on digital archiving in Eastern European libraries, which contrasts with its lesser prioritization in Nigeria. These variations underscore the contextual specificity of ICT skill sets essential for librarians' effectiveness across different geographic locales.

The extent to which the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles

The results of the analysis conducted revealed that the availability of ICT training and development opportunities to a large extent impact librarians' willingness to engage with ICT in their professional roles. This aligns with Aharony's (2019) study, which found that continuous professional development and ICT literacy are pivotal in librarians' ability to integrate new technologies. However, contrastingly, Raju's (2020) investigation suggests that while training is crucial, organizational culture and support play a more dominant role in the actual utilization of ICT by librarians. This is further nuanced by Mtega et al. (2023), who argue that beyond training, the availability of resources and infrastructure significantly dictates ICT adoption in library settings, pointing to a multifaceted set of factors influencing librarians' engagement with ICT.

The perceived barriers that hinders willingness to use ICT among librarians

The results of the analysis conducted revealed that the perceived barriers that hinders willingness to use ICT among librarians, include firstly lack of formal training in ICT, then inadequate ICT infrastructure, followed by complexity and user-unfriendliness of some ICT

tools, and finally concerns about data security and privacy issues associated with ICT. Similar to this finding, Ani and Ahiauzu (2020) identified inadequate ICT infrastructure and a deficiency in formal ICT training as significant impediments, underlining a pervasive challenge across the library sector. Conversely, Raju's (2020) investigation diverges by prioritizing organizational and financial constraints over the complexity and user-unfriendliness of ICT tools, suggesting that institutional support might play a more critical role than previously considered. Furthermore, while concerns about data security and privacy are acknowledged, Singh, Gordon, and Kochtanek (2019) place a greater emphasis on the digital divide and socio-economic factors, expanding the discourse beyond individual and organizational levels to broader societal influences. These indicate a complex landscape of ICT adoption in libraries, shaped by a multitude of interrelated factors.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

The entire efforts of this study focused on the impact of information and communication technology (ICT) literacy on librarians' willingness to utilize ICT resources.

In an attempt to effectively and succinctly achieve the objectives of the study, four research questions were drafted as a blue-print for the study. They include;

- How do ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria?
- What are the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries?
- To what extent does the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles?
- What are the perceived barriers that hinders willingness to use ICT among librarians?

A total of one hundred and eighteen (118) Librarians from John Harris Library, University of Benin, was adopted as the study's sample. Same number (118) of these questionnaires were retrieved and used for the study's empirical analysis. The obtained data were analysed using frequency counts, simple percentages, mean and standard deviation.

Findings

Based on the obtained and analysed data the following are the salient findings;

- ICT literacy skills significantly influences librarians' willingness to adopt and use ICT in academic libraries in Nigeria.
- The specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries, include firstly ability to effectively search and retrieve digital information, then proficiency in using library management software, followed by competence in digital archiving and preservation methods, and finally familiarity with digital databases and e-journals.
- The availability of ICT training and development opportunities to a large extent impact librarians' willingness to engage with ICT in their professional roles.
- The perceived barriers that hinders willingness to use ICT among librarians, include firstly lack of formal training in ICT, then inadequate ICT infrastructure, followed by complexity and user-unfriendliness of some ICT tools, and finally concerns about data security and privacy issues associated with ICT.

Conclusion

This study conducted at John Harris Library, University of Benin, which meticulously examined the impact of information and communication technology (ICT) literacy on librarians' willingness to utilize ICT resources, yielded profound insights. The unanimous

response from 118 participating librarians underscored that ICT literacy is a pivotal factor influencing their readiness to embrace ICT in their professional milieu. It was delineated that specific competencies, such as the adeptness in digital information retrieval, proficiency in library management software, digital archiving skills, and familiarity with digital databases and e-journals, are quintessential in bolstering this willingness. Furthermore, the study highlighted the critical role of accessible ICT training and development opportunities in encouraging librarians towards ICT adoption. However, the path to ICT integration is fraught with challenges, including the absence of formal ICT training, inadequate ICT infrastructure, the complexity of certain ICT tools, and apprehensions regarding data security and privacy, which collectively dampen the librarians' enthusiasm towards embracing ICT. This study thereby offers a comprehensive understanding of the variables influencing librarians' engagement with ICT, which is essential for formulating strategies to enhance ICT literacy and mitigate the identified barriers within the realm of Nigerian academic libraries.

Recommendations

From the findings, the following recommendations are therefore presented below;

1. Firstly, it is imperative to improve ICT literacy among librarians through structured and continuous training programs. Given the significant influence of ICT literacy on librarians' willingness to adopt ICT, institutions should prioritize comprehensive training that encompasses key skills such as effective digital information search, library

management software utilization, digital archiving, and familiarity with digital databases and e-journals.

2. Secondly, the critical nature of specific ICT literacy skills, particularly in digital information retrieval and library software proficiency, suggests the need for targeted skill development initiatives. Academic libraries should collaborate with ICT departments to design bespoke training modules that address these areas. By focusing on these critical skills, librarians can be better equipped to navigate the digital landscape of modern libraries, thereby enhancing their efficiency and service delivery to library users.
3. Furthermore, the findings underscore the importance of providing ample ICT training and development opportunities for librarians. Institutions should consider establishing partnerships with technology firms and academic bodies to facilitate regular workshops, seminars, and hands-on training sessions. Such initiatives not only broaden the ICT competencies of librarians but also foster a culture of continuous learning and adaptability to technological advancements in the library and information science field.
4. Lastly, addressing the perceived barriers to ICT use among librarians is crucial for fostering a conducive environment for technology adoption. Strategies to mitigate these barriers include upgrading ICT infrastructure to ensure reliability and ease of use, simplifying complex ICT tools through user-friendly interfaces and support materials,

and implementing robust data security measures to alleviate privacy concerns. By systematically addressing these challenges, academic libraries can significantly enhance librarians' willingness and capability to integrate ICT resources into their professional practices, thereby enriching the library's value proposition to its patrons.

Suggestion for Further Studies

Building on the findings that ICT literacy significantly influences librarians' willingness to adopt and utilize ICT resources in Nigerian academic libraries, future research could expand the scope to a comparative study across multiple regions or countries to discern cultural, economic, and infrastructural impacts on ICT adoption among librarians. A mixed-methods approach combining quantitative surveys with qualitative interviews could provide a more nuanced understanding of librarians' attitudes, motivations, and challenges regarding ICT use. A larger and more diverse sample size, potentially including hundreds of librarians from various academic institutions, would enhance the generalizability of the findings. The objectives should aim to identify universal and region-specific ICT literacy skills, investigate the impact of continuous professional development in ICT on librarians' job performance and service delivery, and develop a framework for addressing the barriers to ICT use in libraries. This comprehensive approach would not only build on the existing body of knowledge but also offer actionable insights for policymakers, library administrators, and ICT trainers.

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APPENDIX

QUESTIONNAIRE

**DEPARTMENT OF EDUCATION MANAGEMENT, FACULTY OF EDUCATION,
UNIVERSITY OF BENIN**

**Questionnaire on The Influence of ICT Literally Skill on Librarians Willingness to use
ICT.**

APPEAL FOR THE COMPLETION OF QUESTIONNAIRE

Dear Sir/Madam,

This questionnaire solicits information from you. It is designed to find out the “The Influence of ICT Literally Skill on Librarians Willingness to use ICT.”. The information supplied will be treated in confidence and this exercise is purely for research purpose. Please tick the appropriate answer to each question. Thank you

Section A: PERSONAL DATA

1. Sex: Male [] Female []
2. Age: Below 18 Years [] 18-25 years [] 26 years and above []
3. Years of Experience as a Librarian: Below 5 Years [] 6-10 years [] 11 years and above []

SECTION B: GENERAL

How do ICT literacy skills influence librarians' willingness to adopt and use ICT in academic libraries in Nigeria?

| S/N | ITEM | SA | A | D | SD |
|-----|--|----|---|---|----|
| 4 | My proficiency in ICT tools enhances my confidence in integrating them into my library services. | | | | |
| 5 | Familiarity with digital databases positively affects my attitude towards employing ICT in library operations. | | | | |
| 6 | Continuous ICT training sessions increase my propensity to use advanced ICT solutions in the library. | | | | |
| 7 | The level of my digital literacy correlates with my enthusiasm for adopting new ICT tools in the library. | | | | |

What are the specific ICT literacy skills that are most critical in enhancing librarians' willingness to use ICT in Nigerian academic libraries?

| | ITEM | SA | A | D | SD |
|----|---|----|---|---|----|
| 8 | The ability to effectively search and retrieve digital information enhances my motivation to utilize ICT resources. | | | | |
| 9 | Familiarity with digital databases and e-journals is a significant factor in my willingness to engage with ICT. | | | | |
| 10 | Proficiency in using library management software positively influences my inclination towards ICT adoption. | | | | |
| 11 | Competence in digital archiving and preservation methods increases my readiness to use ICT tools. | | | | |

To what extent does the availability of ICT training and development opportunities impact librarians' willingness to engage with ICT in their professional roles?

| S/N | ITEM | SA | A | D | SD |
|-----|---|----|---|---|----|
| 12 | Access to ICT training programs increases my confidence in using technology in my library tasks. | | | | |
| 13 | The presence of continuous professional development in ICT makes me more inclined to use digital tools in my work. | | | | |
| 14 | My willingness to adopt new ICT tools is influenced by the availability of specialized training tailored to librarians. | | | | |
| 15 | Having a structured ICT skill enhancement plan in place motivates me to engage more with technology in my library duties. | | | | |

What are the perceived barriers that hinders willingness to use ICT among librarians?

| | ITEM | SA | A | D | SD |
|----|--|----|---|---|----|
| 16 | I feel that the lack of formal training in ICT limits my ability to effectively use it in my library duties. | | | | |
| 17 | I perceive the existing ICT infrastructure in my library as inadequate for supporting advanced technological applications. | | | | |
| 18 | The complexity and user-unfriendliness of some ICT tools make me hesitant to incorporate them into my work. | | | | |
| 19 | Concerns about data security and privacy issues associated with ICT deter me from utilizing these resources more fully. | | | | |