

**ADHERENCE TO REFERENCE SERVICE STANDARDS FOR
SERVICE DELIVERY IN SELECTED FEDERAL UNIVERSITY
LIBRARIES IN NORTHEASTERN NIGERIA**

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DECLARATION

This thesis is my original work and has not been presented for degree or other awards in any other university.

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DEDICATION

To my esteemed grandparents, the late Rev. Dr. Mammadu K. Mshelbila and late Mrs. Halima Mammadu Mshelbila for their unwavering support and profound inspiration and to my beloved mother Mrs. Mary Abana for her invaluable love, support and prayers.

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ABBREVIATIONS AND ACRONYMS

ALA	American Library Association
ATBU	Abubakar Tafawa Balewa University
CVR	Content Validity Ratio
CVRS	Collaborative Virtual Reference Service
DRS	Digital Reference Service
FAQ	Frequently Asked Questions
FUTY	Federal University of Technology Yola
ICT	Information and Communication Technology
IFLA	International Federation of Library Association
IM	Instant Message
IP	Internet Protocol
IR	Institutional Repository
LANs	Local Area Network
LIS	Library and Information Science
MGCP	Media Gateway Control Protocol
NUC	National Universities Commission
RUSA	Reference and User Services Association
SMS	Short Message Service
VOIP	Voice-Over Internet Protocol
WANs	Wide Area Network

ABSTRACT

The criteria for delivering efficient reference services are defined by reference service standards. The extent to which these standards are implemented in reference service delivery can be used to measure a service's effectiveness. Despite the importance of the standards, few documented research on the evaluation of reference service efficacy utilizing the standards as a critical criterion for assessing reference service transactions have been conducted, particularly in Nigerian university libraries. As a result, the adoption and adherence to the International Federation of Library Association (IFLA) and Reference Users Service Association (RUSA) reference standards in the selected university libraries in Northeast Nigeria was thoroughly examined in this study in order to offer ways in which the reference service can reinvigorate the patron's perception of the use of Libraries. The study addresses reference services and methods of delivery used by reference librarians to provide services, evaluation of reference librarians' behavioral performance by postgraduate students to determine whether it aligns with IFLA and RUSA guidelines, establish how reference librarians' behavioral performance meet the information needs of post graduate students', and users' satisfaction with reference librarians' behavioral performance, challenges to effective service delivery, and best practices for dealing with these challenges. 302 postgraduate students, 86 reference librarians, and 4 heads of library services were proportionately used from four federal institutions in Northeast Nigeria and utilized as the study's sample. Data was gathered using a questionnaire and an interview schedule. The instruments were verified by panel experts to determine the content validity ratio = CVR of 1 by subjecting replies to Lawshe's template, and r-coefficients of 0.89 and 0.85 were obtained as r-coefficients using the Cronbach Alpha technique to verify the instrument's internal consistency (homogeneity). Data was collected using a non-proximal approach and analyzed using descriptive statistics (frequency count and percentages), while chi-square was used to establish statistical significance of quantitative data obtained from participants across the universities under investigation. The qualitative data gathered through interviews was coded and thematically analyzed to supplement the quantitative data source's conclusions. According to student reports, traditional reference services are provided at universities utilizing both face-to-face and digital reference service techniques, and the behavioral performance of reference librarians in accordance with IFLA and RUSA standards practice was not satisfactory. Students' information needs were constant across institutions, however postgraduate students' satisfaction with reference librarians' behavioral performance was inconsistent among universities, and students were dissatisfied with the reference librarian's behavioral performance. According to the findings of the study, conventional reference services are the basic services that university libraries provide to their patrons via traditional (face-to-face and digital means), postgraduate students' informational needs, and satisfaction is significantly influenced by reference librarians' behavioral performance as suggested by IFLA, and RUSA standards practice. The study recommended that; reference librarians should take advantage of training that will have a direct impact on their behavioral performance. This would improve contact between librarians and patrons, increasing user satisfaction

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

This chapter provides an overview of the study on adherence to reference services standards for service delivery in university libraries. It contains the background of the study and then states the problem, purpose, and objectives of the study. It also outlines the research questions, study limitations, and delimitations significance of the study, theoretical and conceptual framework, and operational definitions of terms.

1.2 Background to the Study

Libraries play a crucial role as educational hubs within the academic environment, possessing an important function that should not be underestimated. The historical importance of libraries in culture and society has long been recognized and emphasized (Weise, 2004). The library functions as a pivotal center for academic endeavors within the university community, offering patrons access to dependable and invaluable information resources and services. Libraries are crucial in ensuring equitable access to information and education, irrespective of individuals' socioeconomic backgrounds or geographical circumstances. However, they often present challenges in terms of accessibility and affordability in alternative avenues. Numerous university libraries have successfully implemented comprehensive institutional programs to prioritize research, optimize information management systems, and bolster researcher training and support. Libraries have garnered recognition and earned esteem from upper-level administration as a result of their notable achievements in fulfilling this particular role (Amina and Olise, 2015).

Academic libraries strive to fulfill their primary goal of disseminating high-quality information to their users. To achieve this, they procure a vast array of information materials in diverse formats, encompassing newsletters, journals, directories, books, and media resources, among other sources. The diverse range and dependable nature of library resources frequently attract individuals with varying abilities and interests to the library, fostering a conducive learning environment where they can access the necessary information to meet their informational requirements (Abdulkadir, 2012). Due to the diverse range of resources and services available at the library, it is possible that certain individuals within the community may lack awareness regarding the appropriate methods for accessing the desired services or sources to fulfill their informational requirements. Hence, the reference service is a valuable resource for users who may be unfamiliar with various library services and resources (Hussien, 2018). It serves as a helpful avenue for users seeking assistance in navigating the library's resources.

Reference service is a type of personal assistance provided by a reference librarian to a library patron; it is one of the most important services that every library should offer its users. Consultations with reference librarians to assist library users with specific information needs, as well as personal support provided to patrons, are the foundation of reference services and the core role of reference librarians (Bunge and Bopp, 2001). According to the Online Dictionary for Library and Information Science (ODLIS), "reference service." encompasses the various responsibilities carried out by a trained librarian working in the reference section of a library to fulfill the information needs of patrons. These responsibilities include, but are not limited to, responding to substantive inquiries, providing guidance on the selection and

utilization of appropriate tools and techniques for information retrieval, conducting searches on behalf of patrons, guiding users to the location of library resources, aiding in the evaluation of information, making referrals to external resources when necessary, maintaining reference statistics, and contributing to the development of the reference collection (Reitz, 2006).

The concept of providing assistance to users in locating information has a long history dating back to the development of libraries. However, the modern notion of a "library reference service" was first introduced by Samuel Swett Green in 1876. In an article published in the "Library Journal", Green highlights the significance of proactive support provided by librarians in facilitating users' access to desired information. In his influential article of 1879, presented a comprehensive examination of the fundamental roles performed by the Reference Librarian, identifying a total of four key functions. The responsibilities of a library professional include providing guidance to library users, addressing their inquiries, assisting in the selection of appropriate resources, and actively promoting the library's presence within the community (Ranasinghe, 2012). Green's ideas emerged during a period when librarians primarily focused on the procurement and organization of materials within library collections.

Dr. S.R. Ranganathan further developed Greens concepts and categorized reference services into two distinct categories: Ready reference service and Long-range reference service (Rajaram *et al.*, 2016). A ready reference service is a reference service that is completed in a very brief amount of time, ideally in a single instant. In the case of available reference service, the reference staff can respond to the inquiry in

a very brief period, or even immediately. Rashid (2023) conceptualized Ready reference service as the most basic type of reference service, which involves answering simple questions that can be quickly answered with a quick reference source or resource, such as a dictionary or encyclopedia, yearbooks, directories, biographical dictionaries, geographical dictionaries utilized in rapid reference service

Long-Range Reference Service: The long-range reference service is not promptly available. Few long-range reference queries can be answered in less than thirty minutes, while others can take an entire day or even weeks. In long-range reference services, the search for information begins with ready reference services and continues with ordinary literature, reports, etc. If information cannot be found in the library, the search may be expanded to include the resources of other libraries or even libraries from around the world (Lisbdnetwork, 2016).

Ezekwe and Muokebe (2012) and Dhar (2010) have identified various types of reference queries that library users are likely to make, and these include the following:

A straight or directional question is a type of question that elicits a straightforward and concise answer. Users require guidance on locating information resources. The user may inquire about the location of the Serial section or the whereabouts of the encyclopedias, among other queries (Ezekwe and Muokebe 2012). Factual or ready reference questions are answered using basic information found in reference material. Examples of factual or ready reference questions include inquiries about the inventors of electricity, the formula for sulfuric acid, and the density of gold etc., answers to such questions can be readily obtained from reference books located on the reference desk or shelves (Dhar, 2010). Topical or specific questions refer to inquiries that are typically raised regarding current or significant issues. Such inquiries may require

extensive exploration of multiple sources because of the potential scarcity of available information. Examples of such queries may encompass topics such as the significance of Vitamin C, the properties of water, and sources of background information. Inquiries pertaining to long-range or advisory questions seek the guidance of librarians in determining the availability of information sources. These questions encompass a wide range of topics, including advancements in car manufacturing as well as the historical aspects of law, economics, and political science, among others. Therefore, the resolution of these inquiries necessitates the utilization of a multitude of specialized information sources, as limited sources are insufficient to provide satisfactory answers (Ezekwe and Muokebe, 2012)

Atanda and Uchendu, (2017) identified various reference services offered in university libraries from Ranganathan's two broad categories (Ready and Long-range reference services), such as information services, bibliographic verification and documentation services, inter-library loan and document delivery services, current awareness services, user education, selective dissemination of information, reprographic services, and computerized reference sources. Information Services encompass specialized resources and agencies that cater to the specific needs of library users and information seekers. Ready reference tools, such as dictionaries, directories, encyclopedias, handbooks, manuals, atlases, gazetteers, indexes, and bibliographies, can provide answers to these services. Bibliographic verification and documentation services employ bibliographic tools to ensure the accuracy and comprehensiveness of utilized information. Atanda and Uchendu, (2017) identified tools and resources such as abstracts, indexes, gazettes, encyclopedias, almanacks, catalogues, and bibliographies in addition to, documentation services provided

monthly lists of new additions, reading lists, subject bibliographies, and lists of contents. Inter-library loan and document delivery services play a crucial role in addressing the challenges posed by increasing document costs and limited library budgets. Libraries can borrow materials from neighboring libraries to promptly provide them to users as needed.

Furthermore, current awareness services (CAS) are offered to researchers to provide them with timely updates on relevant publications that can support their research endeavors. Library services can be customized to meet the specific information requirements of users. This can include tasks such as organizing periodicals, summarizing, or categorizing documents, distributing lists of available resources, and disseminating informative bulletins. User education is a crucial aspect of libraries as it enables the development of information-seeking skills among users, empowering them to autonomously navigate and utilize library resources (Inyang and Otun, 2021). Selective dissemination of information (SDI) services are reference services that provide users with updated information. Reprographic services offer essential reference and information services, including the preservation and provision of reading materials issued on low-quality paper. These services also address storage issues, enhance accessibility to rare or limited documents, and provide a platform for publishing specialized materials that may not be economically viable for commercial publishing (Inyang and Otun, 2021). In the 21st century, computerized reference sources have gained popularity as they offer access to electronically retrievable information across different disciplines. Online reference sites are important for providing reference and information services to users.

The reference service section of a library typically encompasses various elements, such as a designated reference desk, a collection of reference sources, and a team of specialized personnel commonly referred to as reference librarians. The reference desk is a commonly utilized resource in libraries, helping patrons seeking information. This service can be accessed through various mediums, including in-person consultations, telephone inquiries, email correspondence, or online chat platforms. However, for complex research inquiries, library users may be requested to visit the library in person for more comprehensive support (Arya and Mishra, 2012). The presence of a well-staffed and knowledgeable reference desk is a fundamental component of the reference section of a library. Reference sources utilized in within the reference section for academic research encompass dictionaries, encyclopedias, thesauri, directories, and similar resources that furnish comprehensive and broad-ranging information on diverse topics (Yatin *et al.*, 2018). Reference librarians are commonly recognized as individuals who serve as intermediaries between users and information sources. They are often described as skilled professionals who navigate the vast landscape of the information superhighway.

Reference services in academic libraries have continued to evolve in terms of service delivery as library and information services transition from traditional to digital forms and modes of delivery. Academic library reference systems are often hybrids, integrating the traditional (face to face) with current technological advancement trends and transforming information services delivery from manual to innovative approaches through the usage of technology (digital) (Ogar and Dushu, 2018). This integration advances our understanding of intermediation in reference services by

combining traditional, reactive service delivery methods with proactive autonomous digital service delivery methods (Gibson and Mandernach, 2013).

Historically, reference service has been provided through various means such as in-person interactions at a dedicated reference desk within the library premises, telephonic communication, and correspondence. In recent times, libraries have undergone significant expansion to provide electronic reference services through various mediums such as the World Wide Web, e-mail, and two-way videoconferencing (Cordell, 2013). Classroom and one-on-one instruction in the utilization of print and electronic resources represents an additional modality of reference service. Irrespective of the mode of delivery, the fundamental objective of reference service remains consistent: to offer high-quality information and personalized assistance to library users when they require it. The provision of reference service is distinguished by the presence of direct human engagement (Ranasinghe, 2012).

The twenty-first-century information environment has realized that conventional methods of delivering reference services are no longer that valuable to contemporary patrons. As a result, enhancements are necessary to meet current information needs. (Musangi, 2015). Therefore, traditional reference transactions have shifted to an online format known as Digital Reference Services (DRS), alternatively referred to as Virtual/Electronic/Online Reference Services (Ranasinghe, 2012). Since 2000, digital reference services (DRS) have been among the numerous innovations implemented in the library environment as seen by Nordin et al., (2012). Providing reference services through an electronic medium simply refers to the concept of remotely delivering

reference services electronically, either in real or delayed time, through the utilization of the Internet and other telecommunication devices. Digital reference services are classified as asynchronous and synchronous. Today's libraries are on the cutting edge of the push to provide patrons with convenient digital reference services that meet their information needs at any time and from any location (Malik and Mahmood, 2014).

The term "asynchronous digital reference service" refers to connectivity that occurs in only one direction at a time and there is a time delay between the question and answer period when using the email, web form, or 'Ask a librarian' services. (Kadir and Singh, 2015). The implementation of a pause allows librarians to address requests at their discretion, following a thorough process of critical analysis aimed at enhancing the coherence and comprehensiveness of their responses (Shachaf and Horowitz, 2008). The synchronous service is characterized as "real-time," meaning that it promptly responds to an inquiry. Two-way communication over the Internet between a library user and a librarian is facilitated. The utilization of various technologies such as instant messaging, Voice-Over-Internet Protocol (VoIP), chat, and webcam services has been observed in the realm of communication (Kadir and Singh, 2015; Nicholas, 2011).

To enhance the effectiveness of reference librarians and foster improved interaction between librarians and users during reference services, the Reference User Services Association (RUSA) of the American Library Association (ALA) and the International Federation of Library Associations (IFLA) have jointly established standardised regulations. These regulations aim to ensure the provision of high-

quality services, as highlighted by (Shachaf, 2008). RUSA initially published Guidelines for the Professional Behaviour of Reference and Information Service Providers in 1996 for conventional reference services, and then revised them in 2004 to include face to face and remote methods of reference services delivery. (Ward et al., 2004). The RUSA board approved the most recent version of the RUSA guideline in May 2013, and it can be obtained from the RUSA website (RUSA, 2020). The RUSA guidelines are broadly grouped into five areas with specific standards that the reference librarians are expected to observe during in-person or virtual reference sessions. The first category of the RUSA standards deals with the visibility and approachability of the library reference service provider. The second category of the standards deals with the interpersonal attitude of the reference librarians towards the user of reference services.

It states that a reference librarian should show objective interest in serving the user with non-judgmental interest. The third group of standards addresses the reference librarian's obligation to listen and make probing inquiries to understand the user's concern better. RUSA's fourth category of the standards outlines how the search process should successfully retrieve the most relevant information resource. The last group of the standards addresses making follow-ups to establish whether the library user was satisfied with the services.

IFLA, the primary global organization serving the interests of libraries, their users and information services, has developed similar standards. IFLA is widely acknowledged as the authoritative representative of the library and information profession on a global scale. Over the course of its existence, the International

Federation of Library Associations, and Institutions (IFLA) has diligently cultivated a comprehensive array of standards encompassing various facets of library resources and services. IFLA's primary objective is to establish, uphold, and abide by the most stringent standards that foster exemplary library practices (IFLA, 2014). The IFLA guidelines, encompassing a diverse array of styles and subtext, provide maximum benefit to the global library community. The IFLA March 2008 digital reference guideline recognizes and integrates the Guidelines for the Behavioral Performance of Reference and Information Service Providers. The digital reference standards established by the International Federation of Library Associations and Institutions (IFLA) are categorized into two distinct sections, namely Digital Reference Service Administration and Digital Reference Practice. The standard for practitioners is comprised of four main components: general guidelines, content guidelines, chat guidelines, and chat session guidelines.

Ethical awareness and participation are essential components of all library services, and the values developed for the profession typically apply in their entirety to individuals employed in reference services (Mbofung and Popoola, 2014). In the same way as therapists would do their patients little benefit if they did not keep their information secret, reference librarians must adhere to standards of conduct in order to give a successful service. The current Code of Ethics of the American Library Association, which was last amended in 2008, serves as a valuable reference. This code supports several fundamental contemporary library concepts. The code urges librarians to give the same high quality of service to all library patrons and to deliver "accurate, impartial, and polite" information. This statement is fundamental to a good reference service, which seeks to offer all users with high-quality information and

resources. Each time a user asks a question, the reference staff must understand what defines a good reference encounter and attempt to achieve that quality (Bunge, 1999).

The importance of standards and guidelines cannot be overstated, as the advent of digital reference introduces novel issues and challenges (Fullerton, 2002). In a similar vein, librarians who adhere to digital reference guidelines during their interactions with users through a chat reference service can contribute to the enhancement of service quality and overall user satisfaction. Therefore, it is evident that the strict adherence to these established standards will effectively facilitate the implementation of high-quality practices, streamline reference services, and ultimately enhance user satisfaction (Kwon and Gregory, 2007).

According to the American Library Association (2006), the standards are intended to provide a comprehensive framework that employs an outcomes-based approach. Institutions are encouraged to utilize these Standards in a manner that aligns with their specific local purpose and vision. The reference procedures and user expectations in libraries differ across countries due to the influence of various public service traditions. An essential element of this discourse entails comprehending that the progression of novel technology will empower librarians to redefine their services. The objective of these guidelines is to foster cultural unity by establishing fundamental criteria that will enable the global library community to freely express themselves (Stasselova, 2010). Multiple studies have provided evidence regarding the significance and advantages of following the guidelines. Furthermore, it has been observed that adhering to these guidelines can greatly enhance user service and

satisfaction (Ward *et al.*, 2004; Nilsen, 2005; Kwon and Gregory, 2007; RUSA, 2020).

In the library world, there exists a multitude of advocates for the establishment of reference services standards. The adherence to reference service standards has afforded academic libraries the chance to improve their service delivery. A study conducted by Maness *et al.*, (2009) at the University of Denver in the United States of America outlines strategies to improve the efficiency and effectiveness of digital reference services. The study focuses on identifying key service characteristics and devising novel assessment metrics. The study reveals that librarians sometimes fail to adhere to certain areas of professional behavior during their transactions or inadequately describe them in professional standards. The librarian is expected to uphold professional standards irrespective of the behavior exhibited by the patron.

The extent to which these standards have been adequately adjusted to virtual environments is a subject that warrants further examination and discussion. In their study, Nordin *et al.*, (2012) noted a limited number of analytical tests conducted in Malaysian university libraries to assess the efficacy of asynchronous digital reference services, including ask a librarian, web forms, and online reference desks. In a parallel investigation conducted by Ronan *et al.*, (2007) at the University of Florida, Gainesville, it was observed that a significant portion of librarians and library staff members, who were surveyed, displayed a hospitable and courteous demeanor during online reference interactions. However, regrettably, a considerable number of librarians did not adhere to crucial elements of the established guidelines that facilitate more effective reference interviews.

A significant number of African nations exhibit limited familiarity with and compliance towards established protocols for adopting and efficiently managing digital reference services (Younus, 2014). Behavioral guidelines have been widely acknowledged as valuable tools for assessing both in-person and virtual reference interactions (Nilsen, 2005). Based on a study conducted in Ghana by Luo and Buer, (2015), it was found that library patrons expressed favorable perspectives regarding various aspects of the reference service provided at the Information Help Desk. The respondents of the poll expressed a notable inclination towards utilizing the information help desk in the future and recommending it to others.

Furthermore, their proposition to enhance information help desk services through the extension of operating hours, increased staffing, and the establishment of additional locations further reinforces this notion. Based on the analysis of the survey response, it appears that the performance of information help desk librarians was more notable in terms of exhibiting customer service attributes such as friendliness and attentiveness, rather than in comprehending customers' information requirements and conducting effective searches to fulfill those needs. According to Kwon, (2004), adhering to RUSA's behavior guidelines during the provision of reference services resulted in increased patron satisfaction with the response, a heightened perception of staff quality, and a greater likelihood of utilizing the service again.

In a study conducted by Uutoni, (2018), an analysis was performed on the digital reference services offered at the Polytechnic of Namibia Library and the University of Namibia in Namibia. The findings revealed that both libraries implemented a digital reference model that was derived from the virtual reference desk project in 1998. This

model encompassed various methods of communication such as email, web forms, and the "ask a librarian" feature, which were utilized in responding to inquiries from library patrons. The research revealed that none of the two libraries provided training for librarians who deal with digital reference services. In addition, the inability to adequately illustrate to users how to use different library services was identified as one of the greatest obstacles librarians faced. The findings of the study revealed that the two libraries were found to be non-compliant with the staffing and training criteria set forth by the American Library Association's Reference and User Services Association (RUSA) and the International Federation of Library Associations (IFLA) in relation to librarians involved in digital reference services.

In Kenya, Musangi (2015) reveals that several university libraries provide DRS for both asynchronous and synchronous operations. The availability of DRS in academic libraries in Kenya a result of librarians' reaction to the ever-increasing escalating information requirements and a shift in the information-seeking routines and conduct of library patrons, who are becoming less visible in the library. It is notable that the traditional reference desk remains the most popular method for obtaining assistance in a library, but due to the changing needs and expectations of library users, DRS has become appealing to millennials because they need to satisfy their information needs in a more affordable, convenient, and effective manner. Most Kenyan academic libraries studied use one or more DRS technologies, however, DRS should not be considered a substitute for in-person reference services (Musangi, 2015).

Ola, (2010) outlined the difficulties experienced by the University of Ibadan library during its attempts to use ICT in the delivery of reference services. He cited

insufficient financing, poor infrastructure, a lack of skilled IT staff, and local politics as the main obstacles to efficient reference service provision. Adeyinka and Oyedokun, (2014) researched social media reference services in Nigerian university libraries. They performed a survey to determine service awareness, preferences, and user satisfaction. Facebook, Twitter, and Ask-a-Librarian were identified as the most favored ways for delivering online reference services, according to the findings. Despite the speed at which digital reference services have been adopted across the developed world, libraries in the developing world, especially in Nigeria, has been relatively slow in fully adopting them (Ekwelem et al., 2018). Developing countries such as Nigeria continue to offer reference services via the conventional face-to-face reference desk channel (Baro *et al.*, 2014). Despite the abundance of significant benefits associated with ICT adoption, it has been noted that ICT implementation at Nigerian library facilities remains insufficient due to a variety of challenges (Adebayo *et al.*, 2019).

Best practices for providing reference and library services to the public are included in internationally recognized and consistent standards for reference services such as the IFLA and RUSA reference service standards. Hence, patrons have the right to expect the exact high-quality expectations to be met regardless of where reference service work is performed. It is widely acknowledged that library users would be more likely to broaden their information quest beyond their boundaries if they can rely on the Library and reference service information built on the same set of standards (Connaway, 2015). University libraries are constantly developing and implementing new programmed and services with the hope of meeting the explicit or unspoken needs of library users. Users come to the library for a certain reason, and

this specific reason determines the user's expectations. If users' expectations are met, they are satisfied; if the library falls short of their expectations, they are dissatisfied. Because of their role as a service provider, academic libraries are set up to collect material and physical assets that may be put to use in the development and provision of a wide range of user-facing services (Adamu and Maidabino, 2020). Information services, bibliographic verification and documentation, document delivery, current awareness services (CAS), user education, selective distribution of information (SDI), reprographic services, and digital reference services are all part of the library's repertoire of services.

Reference services is carried out by assessing the service as a whole, both traditional and digital (Logan and Lewis, 2011). Besides, as a result of the evaluation process, research analysis may suggest a need for a drastic change in the Library and reconfigure the services and resources as they are provided to be in line with the lack of the users and the creation of value (Germano and Stretch-Stephenson, 2012). As such, this study evaluates compliance with IFLA and RUSA reference service standards as they pertain to both digital and traditional reference service provided at North-East Nigeria's Federal University Libraries.

1.3 Statement of the Problem

The establishment of a university in Nigeria necessitates the presence of a fully operational and adequately equipped library facility. The National Universities Commission (NUC) is the exclusive regulatory body in Nigeria responsible for the oversight and accreditation of higher education institutions. Its primary mandate is to

ensure that new courses are not approved unless the respective institutions have sufficient library resources, both in print and non-print formats, readily available.

According to a report from the 2014 National Higher Education Forum (NHEF) held in Abuja, the library's significance in promoting literacy and sustainable education was acknowledged as a pivotal element for the advancement of the nation. The National University Commission (NUC) has established Standards and Guidelines to regulate the provision of reference and information services by university libraries in Nigeria. The objective is to enhance the effectiveness of reference services and promote improved interaction between users and librarians. The framework is designed with the objective of attaining a range of goals, which encompass adhering to internationally recognized library standards, fulfilling the information needs of users, and ensuring user satisfaction. In a similar manner, the American Library Association's (ALA) Reference User Services Association (RUSA) and the International Federation of Library Associations (IFLA) have collaboratively developed standardized guidelines with the objective of ensuring the delivery of exceptional quality services and enhancing levels of user satisfaction.

The current state of the ICT infrastructure, reference collection and resource organization, and information literacy skills among students is inadequate. Additionally, there is a lack of physical infrastructure, insufficient library resources, low staff morale resulting from low pay and wages, a shortage of trained librarians, and a negative perception of school libraries by university managers. As a result, the provision of reference and information services to students is nearly nonexistent. Based on the researcher's situational analysis, it has been observed that reference desk

librarians lack formal training in school library administration, specifically in effectively catering to students' information needs through reference services. The absence of established library policies and service standards has had a notable impact on the frequency of library visits, thereby affecting the utilization of resources by library students and the conduct of reference librarians. The dissatisfaction among users stems from the infrequent fulfillment of information requests. The present situation poses considerable challenges with respect to the volume of students utilizing the library for academic pursuits.

It is evident that the continuation of these trends would pose a significant risk to the provision of information services, aligning with the internationally recognized library standards set forth by the RUSA and IFLA. In order to address the specific scenario at hand, the researcher undertakes a comprehensive investigation, thereby necessitating the need for this research to analyze the behavioral performance of librarians in adhering to reference service standards in selected Federal University libraries in Northeast Nigeria. The ultimate objective of this study is to enhance user satisfaction.

1.4 Purpose of the Study

The purpose of the study is to ascertain the extent to which reference service standards are followed in selected Northeast Nigeria's Federal University Libraries with a view to proposing strategies that Northeast Nigerian Federal University Libraries may use to improve adherence to the reference services standards.

1.5 Objectives of the study

The Study's Specific Objectives intended to:

- i. Examine the reference services provided and their delivery methods in accordance with the RUSA and IFLA Digital Reference Service Standard Practice.
- ii. Determine the perception of postgraduate students on reference librarians' behavioral performance in line with RUSA and IFLA digital reference service standard practice.
- iii. Establish how reference librarians' behavioral performance meet the information needs of post graduate students in the selected federal university libraries.
- iv. Determine the perception of postgraduate students regarding the behavioral performance of reference librarians and its impact on user satisfaction with the quality of reference services in selected federal university libraries.
- v. Determine the challenges experienced by librarians in providing reference services in conformity to reference standards?

1.6 Research Questions

The research was guided by the following questions:

- i. What reference services and method of delivery are implemented in Northeast Nigeria's Federal University Libraries?
- ii. What are the perceptions of postgraduate students on reference librarians' behavioral performance in line with RUSA and IFLA Digital Reference Service Standard Practice.?
- iii. How related are the reference librarians' behavioral performance in terms of meeting the information needs of post graduate students in the selected federal university libraries?

- iv. How satisfied are postgraduate students with the behavioral performance of reference librarians and its impact on user satisfaction with the quality of reference services in selected federal university libraries.?
- v. What are the challenges experienced by librarians in providing reference services and adhering to these standards?

1.7 Significance of the Study

An examination of the literature indicates that there has been no previous extensive study of reference service standards adherence in Nigerian university libraries. This research offers insight into the current state of awareness and adherence to internationally recognized standards in the provision of reference services at Northeast Nigerian university libraries. Hence, the study would be useful to the following stakeholders: University management, university librarians, researchers, and policymakers in the following sequence.

This study would provide understanding and clarifications to university management on status of reference services offered in University Libraries in North-Eastern Nigeria. The research holds potential importance for university management in terms of comprehending the advantages associated with offering reference services that align with internationally recognized standards geared towards providing quality information service delivery. The study would enlighten the university management on their responsibility in providing resources such as adequate reference services resources and Information Communication Technology (ICT) facilities that would support the mode of delivering reference services and the successful usage of the library resources by staff and students at universities in North-Eastern Nigeria.

The study would serve as a feedback mechanism to librarians and information specialist on the extent to which reference and information services have been provided to users in line with RUSA and IFLA standards. This would provide an insight to librarians on the effective provision of references service in line with globally accepted standards in University Libraries in Northeast Nigeria. Additionally, the study would provide insight to librarians on the need to consider users' needs and expectations in service delivery as this would enhance quality service delivery meant to improve user's satisfaction.

The study would contribute to the existing body of literature on reference service standards to researchers who would want to venture into similar research area on same or different study location. This is necessary because of inadequacy of extensive research conducted on adherence to reference service standards in university libraries in Nigeria.

The findings and recommendations from the study would provide dependable feedback to policymakers such as Nigerian University Commission and Library Registration Council of Nigeria on the status of information service provision and the extent of users' satisfaction for the purpose of inform decision-making. This would aid effective policies formulation that would lead to effective information service delivery.

1.8 Study Assumptions

Assumptions are beliefs and ideology that are held to be true with little or no evidence and not statistically tested in research. Research is built upon assumptions since a

foundation is needed to proceed with the research procedure therefore, assumptions provide basis to conduct of the research study. The assumptions for the study include:

- i. Every librarian is trained about providing reference services in conformity to IFLA and RUSA reference service standards in Federal University Libraries, Northeastern Nigeria
- ii. The level of awareness regarding alternative methods for delivering reference services, as offered by reference librarians, is insufficient among librarians in the Federal University Libraries of Northeastern Nigeria.
- iii. User satisfaction is dependent on the adherence to IFLA and RUSA standards as fundamental reference service standards for traditional and digital modes of reference services delivery.
- iv. The dissatisfaction of patrons with the services provided in Federal University Libraries in North-Eastern Nigeria can be attributed to the lack of training among librarians.

1.9 Limitations and Delimitation

1.9.1 Limitations

First, there has been little documented research on the adherence to IFLA and RUSA standards of reference services in Nigeria. Though, more of RUSA guidelines literature review and how it affects patron's satisfaction was drawn from other developed and developing countries with different education systems from Nigeria. Secondly, due to the constraints imposed by the reference librarians' work hours, limitations were placed on the duration of each interview with the respondents. Consequently, extra time was allocated to engage with the reference librarians in order to gather all essential and sufficient information. Furthermore, it should be

noted that a portion of the questionnaires were not promptly completed and returned on the same day, primarily due to the demanding schedule of library staff.

Thirdly, the study did not consider, or highlight in any way, other factors like insecurity from insurgent activities around the North-East Geo-Political zone in Nigeria and the covid-19 pandemic restrictions where and when the research was carried out, these have greatly affected the availability of respondents and the quality of data supplied. Lastly, there is the problem of time and financial resource constraints.

The researcher overcame some of these limitations by using trained research assistants to distribute surveys at each of the participating institutions. This is because of the current security situation in Nigeria's North-East region. Insurgency (from groups like Boko Haram), abductions, and ethnic and religious conflict all contribute to the sense of unease. To allow research assistants sufficient time to gather the questionnaires and to formally comply with protocol to obtain access to expertise and specialized services as well as approval from authorities to conduct research in the respective libraries, the researcher had to extend the number of days to collect data at each of the selected universities. But the researcher could not contact all the respondents to get the remaining surveys because they did not return the questionnaires.

1.9.2 Delimitations

The research was specifically centered on the Federal University Libraries located within the Northeast Geo-Political Zone of Nigeria. The North-East Geo-Political Zone contains a total of six (6) Federal University Libraries. The study was limited to

four selected university libraries. The libraries possess a sufficient number of qualified librarians who are proficient in providing reference services. Furthermore, these libraries have maintained their operations over an extended period. The remaining two university libraries were established in 2011 and offer reference services with a smaller support of professional librarians compared to the four university libraries chosen for the study. Furthermore, the selected universities are situated in locations conducive to learning and engage in practical research activities, attracting a large number of students. The university libraries comprised in this list are Ramat Library at the University of Maiduguri, Ibrahim Badamasi Babangida Library at Modibo Adama University Yola, Abubakar Tafawa Balewa University (ATBU) Library, and the Federal University Kashere Library.

1.10 Theoretical Framework

A study's theory can be confined or supported inside the theoretical framework. It lays forth the theoretical framework that provides an explanation for the phenomenon being studied (Jozkowski, 2017). A good theory explains the meaning, nature, and problems connected with a phenomena that is frequently observed but unexplained in the environment in which we live, allowing us to behave more intelligently and effectively (Abend, 2008). Now, there is no unified, all-encompassing theory of reference services. Onyancha and Kwanya (2019) stated that there is a widespread notion that the discipline of library and information science (LIS) lacks original theories and instead largely draws from several other disciplines.

As a result, the researcher examined many existing theories in order to identify one that would enlighten the current study. Among these is Caroline Kuhlthau's 1991

Information Search Process (ISP) theory. This theory identifies six critical steps that may be applied to the search, acquisition and use of information. From the user's perspective, the ISP provides six easy processes beginning with task initiation, selection, exploration, focus formulation, collection, and presentation. According to the ISP, the information seeker experiences sentiments of doubt and uncertainty at the start of the search, but as the search proceeds, the thoughts become clearer, and feelings of fear and hesitation transform to confidence and belief. However, the researcher found this theory to be unsuitable for informing the study, which is primarily concerned with adherence to reference service standards. The study is concerned with more of information search process from the librarian's perspective and the behavior of information service providers towards library users in accordance with globally accepted standards.

Another theory that might apply to this study is the Information Foraging theory proposed by Pirolli and Card in 1999. Pirolli and Card introduced the idea of information foraging to characterize information retrieval behavior. The information foraging theory evolved from the optimum foraging theory, which enables scientists to better understand the elements that influence an animal's food preference and eating tactics (Pirolli and Card, 1999). The analogy's core elements are the food supply, the place in which it may be located, the methods for locating it, the instruments available for locating it, and the benefit that can be received from its intake. The following words can be used to translate these principles into an information-seeking context: Information: The item of information sought or discovered, as well as the value it adds to meeting the information requirement; Information patches: the behavioural and geographical characteristics of the clustering of information; Information scents

(Budiu, 2019). The process of determining the value of information based on navigational signals and metadata. Information diet: The process by which one source of information is preferred over another. While the researcher recognizes the benefits of information foraging theory, this theory was found to be insufficiently applicable. This is because the study's emphasis is primarily on the information search process from the librarian's perspective and on the information service providers' behavioral performance toward library users in accordance with globally acknowledged standards.

After considering the aforementioned theories and others, the researcher ultimately settled on the Pomerantz et al. (2004) general digital reference model. This model is based on Lankes (1998) and the Project AskA software requirements paper from the Virtual Reference Desk (VRD) (Lankes, 1998). This model can be applied to Ask a librarian, web forms and email, among other forms of asynchronous digital reference services (Pomerantz et al., 2004). However, this model does not cover the traditional reference services format where assistance is given to library patrons on face-to-face interactions or in-person through physical contact or presence. Nevertheless, the general digital reference model can also be applied to the traditional reference services process in the same way as the digital reference service process. This model is made up of the following five fundamental components:

- a. Acquiring a question: The activity of eliciting information from a library user. The emphasis is on the user's question and question classification, as well as user identifying information provided through email, chat services and online forms.

- b. Triage: The query is forwarded to a pool of possible responses. Queues are created for questions based on parameters such as the date they were received, the topic, and so on. A subject specialist or reference librarian responds to queries. This step could be automated or manually overseen.
- c. Response preparation: It refers to the process by which a subject specialist responds to a query and delivers the response directly to an observer or user.
- d. Tracking: identifies popular themes based on frequently asked questions by library patrons. Librarians might utilize tracking to ascertain which users' queries or difficulties are most commonly asked or faced (hot topics). The term "tracking" is often used to refer to frequently asked queries (FAQs).
- e. Resource development comprises monitoring data in order to build or enlarge collections that satisfy the information demands of users sufficiently.

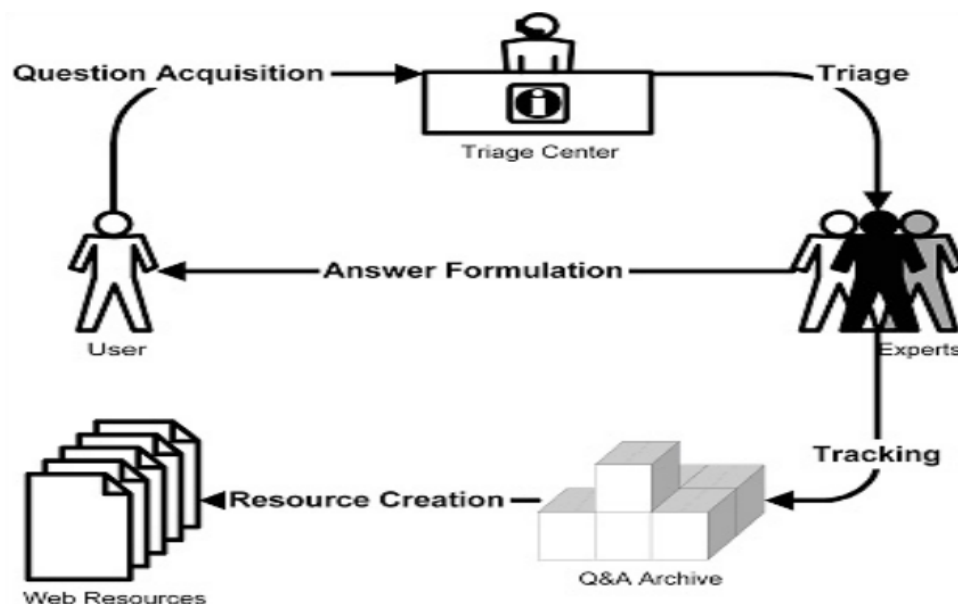


Figure 1.1: Theoretical framework

Source: General Digital Reference Model by Lankes, Richard. (2004)

Thus, the general digital reference model is critical to this study since it evaluates five main phases associated with reference service processes from the librarian's

perspective. These five phases are stages in references services on which librarians adopt in their quest to service provision and to evaluate or determine the information service providers' behavioral performance toward library users. For instance, the Triage center been the service desk and communication hub provided avenue for adherence to RUSA standards of listening to users and asking questions, answer formulation by searching and providing desired materials to users and returning. The tracking phase deals with follow up on resource recreation of exact needs. This is common to IFLA and RUSA standards.

1.11 Conceptual Framework

The conceptual framework describes the researcher's approach to conceiving the relationship between the study's research variables (Mugenda and Mugenda, 2008). As a result, this research includes both independent and dependent variables. Independent variable is used to create a connection, but it may also be utilized to identify cause and effect between the independent variable and the dependent variable. From the conceptual framework below, the reference services and method of delivery, reference service standards, and information needs of postgraduate students are presented as the independent variables.

On the other hand, user satisfaction is presented as the dependent variable of the study. It is to be noted that there are other factors that could affect user satisfaction (dependent variable) apart from reference services standards. These have been presented as intervening variables in the conceptual framework. They include reference librarians training on effective service delivery, ICT skills, library and reference services infrastructure, librarianship skills, and funding are considered

intervening variables which can influence the overall study outcome, user satisfaction. Hence, Figure 1.2 aids in visualizing the relation between the study's variables and primary concepts.

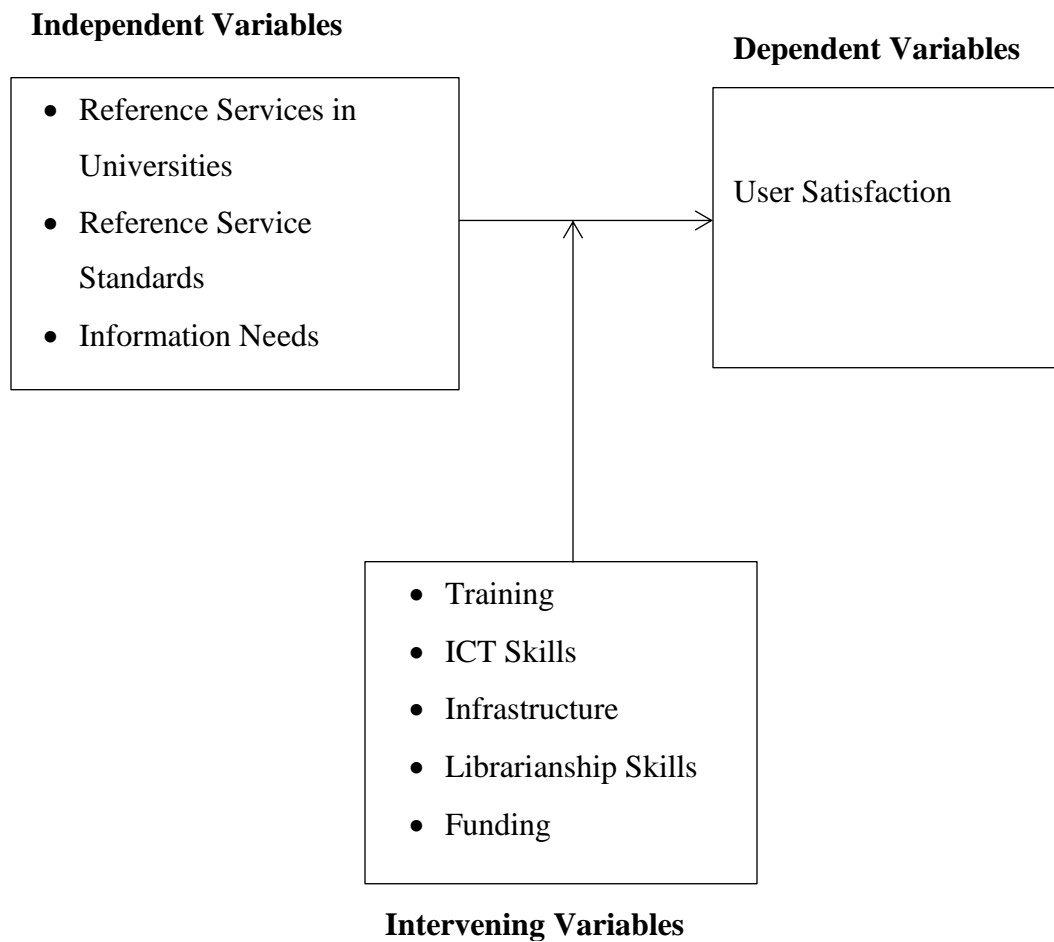


Figure 1.2: Conceptual Framework

Source: Researcher 2022

1.12 Operational Definition of Terms

Asynchronous digital reference service - This is a form of online reference service in which the user asks a question online and receives a response from the librarian within a predetermined time. In other words, there is a time lag between query submission and when the librarian replies.

Digital Reference Service – A concept where the library's reference services are made available online and reference activities are carried out via computer-mediated communication. It is the process through which librarians transmit reference information remotely, via computers, to users who are unable or unwilling to communicate in person.

The International Federation of Library Associations and Institutions - (IFLA) is the leading global organization for libraries, their users and information services. It represents the library and information professionals on a global level.

Guidelines - A guideline is a statement that is used to decide the best course of action. A guideline seeks to simplify certain procedures in accordance with a predetermined routine or good practice. Any company (governmental or commercial) may publish and utilize guidelines to make the behavior of its workers or divisions more predictable and, hopefully, of better quality.

Information and Communication Technology (ICT) – The infrastructure and related technologies that facilitate modern computing.

Library - A collection of resources, such as publications or media that are intended to be used rather than displayed. It is responsible for maintaining current information to meet the daily requirements of users. A library is either a physical location or a virtual space that houses physical (hard copies of documents) or digital resources (soft copies).

Reference services – Used interchangeably with “Reference and information services” or “reader services”. It is the provision of tailored support to users conducting information searches.

The Reference and User Services Association of the American Library Association (RUSA) is a subset of the American Library Association. RUSA provides support for all types of libraries in the areas of reference, user services, genealogy and archives, business reference, collection development, resource sharing, adult readers advisory and reference technology.

Synchronous digital reference service - Any conversation between a customer and an information professional that is mediated by a computer in real.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The chapter reviews the literature on academic libraries' reference services according to the study objectives which includes: reference services in academic libraries, adherence to reference service standard (IFLA and RUSA) in academic libraries, information needs of postgraduate student and reference services, user satisfaction on the quality of reference and information services in libraries and challenges experienced by librarians in providing reference services and adhering to IFLA and RUSA Standards.

2.2 Reference Services Provided and the Delivery Methods in University Libraries

Reference services are critical library functions in academic libraries because they establish a direct connection between the library and its patrons in order to meet their information needs. (Hussien and Mokhtar, 2018). Notably, reference service is an essential component of all forms of information centers and organizations. According to IFLA (2019), information and reference services are said to be among the most important elements of a library operation and provide the face of information access for the public. These services allow library users to obtain information efficiently and correctly in a complex and information-rich environment. Reference services enable consumers to traverse the complex information environment with the help of professionals trained in information access and evaluation.

Traditionally, the reference desks acted as a hub for librarians to link library users with library resources and services. Despite the availability of information and communication technology (ICT) resources, Bandyopadhyay and Boyd-Byrnes (2016) in their Reference Services Review conducted at the Adelphi University and Long Island University New York state that human-mediated search systems will continue to be required. Therefore, research librarians have the primary responsibility of providing qualitative information to cater for users' information needs. Buss (2016), in his study on "Do We Still Need Reference Services in the Age of Google and Wikipedia?" conducted at the University of the Sciences in Philadelphia, advised that the services be improved by increasing service points while still using conventional tools and approaches and introducing comparative philosophies with different patrons rather than discarding these services. A one-size-fits-all service contract solution can be supplemented by one that is tailored to the situation.

Buruga, (2016), conducted a study at the University of Pretoria on the use of mobile technologies for social media-based service delivery at Muni University Library. The study established that navigational assistance is crucial for providing reference services, as patrons often face difficulties with evolving technology and search strategies. This navigational assistance offers innovative tools that effectively aid patrons in navigating the information system and environment. Based on the studies mentioned above, it can be inferred that there is a consensus among researchers regarding the significant role of reference services as a valuable resource for library patrons. These services are seen as crucial in offering expert guidance, personalized assistance, and reliable information to individuals seeking assistance. These services

are of utmost importance in fulfilling the varied information requirements of patrons, promoting information literacy, and enriching the overall library experience.

Pomerantz *et al.* (2006) conducted a study at the State Library of North Carolina titled "Peer review of chat reference transcripts: Approaches and strategies." The study found deficiencies in chat reference services and identified a correlation between reference services and user satisfaction. The study revealed that reference librarians occasionally omitted participating in sessions, such as chats, within academic and public libraries.

Hyde and Tucker-Raymond (2013) investigated the performance of reference librarians using a list of reference service guidelines concerning library users' satisfaction. They came up with the following findings that the patron had submitted a 65% level of satisfaction of duration/time in which a reference interview was conducted while 53% when the reference interview was not performed. Also, Nilsen (2004) found that bypassing reference services, which involves directing patrons to information sources without assessing their usefulness and relevance, as well as neglecting to follow up with patrons to confirm if they obtained the correct information, are factors that contribute to library users' dissatisfaction. Based on the studies mentioned above, it can be inferred that the level of satisfaction with reference services among the respondents is relatively low. The practice of bypassing reference services, whereby patrons are haphazardly directed to information sources without adequate evaluation of their usefulness and relevance, coupled with the neglect to follow up with patrons to ensure the accuracy of the information obtained, are substantial contributors to the dissatisfaction experienced by library users.

Interpersonal skills, professional knowledge, and proficiency in information and communication technology are essential for providing effective reference services. Interpersonal communication refers to the exchange of information, thoughts, and emotions between two or more individuals through verbal or nonverbal means (Jouany and Martic, 2020). Face-to-face communication encompasses the use of verbal language, facial expressions, gestures, and body movements. Interpersonal communication abilities are evaluated based on the efficiency of message transmission between individuals. In their study titled "Functions of interpersonal communication in rendering reference services in two university libraries in Nigeria,"

Udensi and Akor, (2013) examined the role of interpersonal communication in the provision of reference services. The findings of the analysis indicate that the provision of enhanced facilities in the reference section of libraries has been successful in effectively communicating these services to users. This has resulted in improved user knowledge on how to locate information and fulfill their information needs. Furthermore, these services have played a crucial role in keeping users informed about the latest information materials available within the libraries. The findings of the study reveal that the reference librarians' communication skills were found to be lacking in several key areas. The presence of a language barrier, stereotypes, semantic barriers, and the insufficient communication skills of library users all played a significant role in impeding effective communication within the reference library setting.

The study on the role of interpersonal communication in the provision of reference services falls short in adequately addressing the impact of librarians' behavioral

performance in line with RUSA and IFLA guidelines. Instead of exploring into this crucial aspect, the study primarily concentrates on the outcome of enhanced facilities in the reference section. This oversight undermines the comprehensive understanding of the subject matter and limits the study's overall effectiveness. Although some concerns have been raised about standard library procedures, it is important to note that the studies conducted have not adequately evaluated the librarians' compliance with established standards in terms of their interpersonal communication skills while providing reference services.

In their study on the effectiveness of reference services and users' satisfaction in the academic library, Hussien and Mokhtar, (2018) examined the practices at the University Teknologi Mara in Malaysia. The researchers found that to provide effective reference services to library users, it is crucial for libraries to uphold certain key factors. These factors include maintaining accessibility, responsiveness, quality of answers, and effective communication by librarians. By focusing on these aspects, libraries can enhance the overall user experience and ensure user satisfaction. In this study, the researchers sought to gather data on the usage of academic library reference services by students. To achieve this, a total of 231 questionnaires were distributed to a random sample of students.

The purpose of these questionnaires was to collect information regarding the student's experiences and interactions with the library's reference services. By employing a random sampling technique, the researchers aimed to ensure a representative sample that would provide insights into the broader student population's utilization of these services. The findings of this study reveal that there exists a positive but weak

association between service accessibilities, responsiveness of librarians, the quality of librarians' answers, librarians' communication approaches, and users' satisfaction. In examining the role of libraries in providing information resources, it becomes evident that while they do offer a satisfactory range of materials, their ability to effectively respond to users effectively is lacking. As a result of this, it can be concluded that the study only concentrated on maintaining accessibility, responsiveness, quality of answers, and effective communication by reference librarians but did not address the issues of librarians' behavioral performance in line with RUSA and IFLA guidelines.

In their study, Onifade and Sowole, (2011) examined the awareness and perception of undergraduate students regarding reference services at the University of Agriculture Abeokuta, Ogun State, Nigeria. Many students do not widely recognize the reference librarian as a valuable resource for enhancing search skills and fulfilling information requirements. The research revealed that the dictionary is the primary reference source used by the participants. However, students underutilize additional reference sources. Users who are unfamiliar with reference materials may overlook their significance in the context of academic study. In library science, reference librarians play a crucial role in educating users about the importance and value of various reference sources. Librarians can effectively assist users in their information-seeking process and help them make informed decisions when choosing suitable resources.

Reference librarians play a crucial educational role in empowering users to effectively navigate and utilize reference materials. Furthermore, the study's findings suggest that a considerable number of participants are dissatisfied with the relevance of different reference sources. This sentiment stems from the belief that these sources are obsolete

and do not meet their current needs. Unfortunately, the study failed to consider crucial factors such as the population involved, the provision of reference services, and the adherence to standards for these services. This oversight undermines the comprehensiveness and reliability of the study's findings. The study design, data collection tools, process, and analysis method appear to be somewhat similar. This study focuses on two distinct groups: professional reference librarians and postgraduate students. Therefore, the present study aims to investigate the information needs of postgraduate students and assess their level of satisfaction with the library's reference resources.

In a study conducted by Ochili, (2016) on the assessment of reference and information services provided to undergraduate students in federal university libraries in Enugu and Anambra states, similar findings were observed. The study revealed that both university libraries offered reference services to undergraduate students. Additionally, it was found that reference resources were readily available in the reference sections of these libraries. Furthermore, the study indicated that the undergraduate students actively utilized the reference services provided to them in the libraries being examined.

The study's findings indicate that a significant proportion of undergraduate students' express satisfaction with the reference services provided by the libraries under investigation. The study findings also revealed that the reference services in the libraries under investigation are confronted with challenges pertaining to inconsistent power supply and financial limitations. Through a comprehensive analysis of the findings, it becomes evident that these factors significantly impede the effective

functioning of reference services in the libraries under investigation. The study offers a comprehensive overview of the research conducted on the subject matter, emphasizing the significant discoveries and their implications for reference services within library settings. According to Ochili (2016), some undergraduate student's express satisfaction with the reference services provided by the libraries investigated.

However, it is important to note that the study also uncovered several challenges faced by these reference services. These challenges include inconsistent power supply and financial limitations. The stated objective of this study is to investigate the adherence to reference standards and the challenges faced by librarians in delivering reference services in accordance with these standards. This aspect has been severely neglected in previous research endeavors, highlighting the urgent need for conducting this current investigation.

Jacoby and O'Brien, (2005) undertook an investigation titled "Assessing the impact of reference services provided to undergraduate students" at the esteemed Education and Social Science Library (ESSL) of the University of Illinois. The researchers employed a survey-based approach to gather data from a sample of undergraduate students. A total of 69 participants completed the surveys by providing valuable insights for the investigation at hand. In addition to their initial study, the researchers also conducted a series of five follow-up interviews to delve deeper into the participants' experiences and perspectives. The follow-up interviews allowed for a more in-depth exploration of the participants' thoughts, feelings, and reflections, thereby enriching the overall findings of the study.

This methodological choice highlights the researchers' commitment to thoroughness and their dedication to capturing the complexity of the participants' lived experiences. The results of the inquiry indicate that the friendliness exhibited by the reference librarians plays a significant role in determining the level of confidence students have in their ability to seek out information. The importance of these findings becomes apparent when considering their relevance in college and university environments, where the development of independent information search abilities is a primary goal.

The study examines the concept of approachability among reference staff, which is considered an important aspect of their behavioral performance as outlined in the guidelines provided by the Reference and User Services Association (RUSA). The research contributes to the existing body of knowledge on this topic by exploring the undercurrent study that has been conducted in this area. By focusing on the assessment of approachability, the study seeks to shed light on the nature of reference staff's interactions with users and their ability to create a welcoming and accessible environment. The present study shares similarities with the above-mentioned research in terms of its design, data collection instrument, and data analysis method.

However, it differs in terms of the population and sample utilized. While both studies aimed to evaluate adherence to reference standards, the previous research focused on reference librarians and graduate students as the target group. In the realm of library services, the evaluation of librarians' behavioral performance has been a subject of interest for both librarians themselves, who act as service providers, and students, who are the recipients of these services. The study explores the existing research on

the topic, shedding light on the ways in which librarians and students have been able to assess the behavioral performance of librarians more accurately.

Musangi, (2015) investigates reference services within the context of academic libraries. In the context of the 21st century, academic libraries have been subject to a multitude of technological advancements, which have become an integral and irrefutable aspect of their existence. The current state of reference services in libraries necessitates a critical reevaluation and redefinition. Academic libraries must ensure that their reference librarians remain dynamic and adaptable in their service provision and user engagement. It is imperative for librarians to leverage technology and its functionalities to effectively cater to the information and literacy needs of the contemporary "net-gen" user cohort. The evolving landscape of academic libraries, influenced by the integration of technology, has brought about significant transformations in their physical infrastructure and operational dynamics.

Consequently, this has resulted in a notable shift in the dissemination of information, as libraries endeavor to redefine their range of services to align with the evolving needs and expectations of their users. The advent of technological advancements has revolutionized the provision of reference services in libraries, liberating them from the constraints imposed by geographical boundaries. This scholarly article critically examined the utilization of emerging technologies in the provision of virtual reference services, and its impact on academic libraries.

According to Zanin-Yost's (2004) study entitled "Digital Reference: What the Past Has Taught Us and What the Future Will Hold," the emergence of computers and the

Internet has brought about substantial changes in the way libraries fulfil their role in offering reference services. Traditionally, the management of reference inquiries was predominantly conducted using conventional channels, including postal mail, telephone communication, and facsimile transmission. However, the emergence of digital technologies has revolutionised the way libraries engage with users seeking information. The integration of computers and the Internet into library systems has enabled a more efficient and expansive approach to reference services. Libraries have embraced online platforms and databases, allowing users to access a vast array of resources and information at their fingertips. This shift has not only broadened the scope of available materials but has also enhanced the speed and convenience of retrieving information (Zanin-Yost, 2004).

By leveraging the power of the Internet, libraries have transcended the limitations of physical space and time. In contemporary times, the role of librarians has expanded beyond traditional reference desk assistance to encompass virtual support in the digital realm. In the study titled "Blending the Trends: A Holistic Approach to Reference Services," Dempsey (2011), provides a comprehensive examination of the implementation of a holistic reference format at the Evelyn S. Field Library at the Raritan Valley Community College, North Branch, New Jersey, USA. The study explores the concept of integrating various trends in reference services. The researcher emphasizes the importance of adopting a holistic approach to effectively meet the evolving needs of library users. By examining current trends and their impact on reference services, Dempsey provides valuable insights into the potential benefits and challenges of blending these trends. In the realm of academic libraries, the provision of effective reference services has become a pressing concern.

This has led to the emergence of several notable trends, namely tiered reference, roving librarians, and virtual reference. These trends offer academic libraries a range of options to enhance their reference services and cater to the diverse needs of their patrons. By exploring and implementing these innovative approaches, academic libraries can strive towards delivering the most efficient and comprehensive reference service possible. The primary objective of the study was to eliminate the presence of full-time faculty librarians at the conventional reference desk. Dempsey's (2011) believed innovative approach to reference services, which aimed to eradicate the need for full-time faculty librarians at the traditional reference desk, has been met with skepticism. Contrary to Dempsey's claims, Bowron and Weber, (2019) argue that the reference desk still persists as a central hub for user service, although not without its fair share of critics.

Bala and Bala, (2022) in their study entitled "Modern and Information Services of an Academic Library: An Overview," examined various aspects related to the purpose and functions of an academic library. The researchers shed light on the significance of modern academic library services, emphasising the need for their existence in today's educational landscape. Furthermore, they provide a comprehensive analysis of the modern and information services offered by academic libraries, highlighting their role in facilitating access to knowledge and supporting the academic community. Lastly, the authors explore emerging trends in library and information services, offering insights into the evolving nature of these institutions. The study examined the role of academic libraries as trusted hubs within educational institutions, with their services playing a crucial role in supporting various academic endeavours, such as teaching and research.

The utilisation of modern technology, specifically internet technology, within academic libraries has brought about a significant transformation in the conventional approaches to delivering library and information services. The present study examines the necessity of incorporating novel information through diverse channels and the subsequent requirement for an enhanced information infrastructure, such as a library system, to cater to the evolving needs of contemporary users. The increasing demands of technology users have prompted libraries to expand their services or develop innovative offerings. The ever-evolving landscape of the internet has led to the continuous development of information methods and techniques, which are invaluable resources for libraries seeking to enhance their service offerings.

Mcpe and Gowtham, (2019) assert that in today's era of information overload, it is supposedly imperative to acknowledge that the automation of library services is not merely a luxury, but rather an absolute requirement for the smooth operation and optimal performance of a library system. The impact of automation on libraries cannot be denied. It has undoubtedly led to substantial transformations in their nature, concept, approach, and functioning. In today's world, libraries are characterized by a highly interconnected and automated environment, where every task is carried out with the assistance of various communication or information tools.

The studies examined above regarding reference services in university libraries exhibit certain similarities in their data collection and analysis techniques. However, it is important to note that there are notable differences in terms of the target audience and the content of the studies. The transactions between reference librarians and patrons were found to lack proper verification, failing to meet the professional

standard set by IFLA and RUSA guidelines. This study relied on these guidelines to determine the availability and adherence to reference service standards for effective service delivery, highlighting the shortcomings in the current practices.

2.3 Reference Librarians' Behavioral Performance in line with RUSA and IFLA Digital Reference Service Standard Practice.

Numerous libraries worldwide are either offering or exploring the possibility of offering digital reference services. Libraries, in general, may have varying public service traditions that influence both their current reference operations and the views of its customers. New technology, however, may enable librarians to offer a wider range of public services. The RUSA and IFLA digital reference service standards aim to establish specific universal values from various cultures to enable the global group of librarians to discuss possibilities openly.

2.3.1 Reference Librarians' Behavioral Performance in line with IFLA Digital Reference Service Standard Practice.

At the IFLA 2001 Conference in Boston, the Reference Section of the International Federation of Library Associations (IFLA) put forth a project proposal aimed at evaluating and monitoring the automated standards and policies governing referrals. In the year 2002, the International Federation of Library Associations and Institutions (IFLA) released a set of guidelines specifically focused on digital reference. These guidelines incorporate sections from the resource guidelines provided by the Reference and User Services Association (RUSA, 2004). The IFLA's digital reference guidelines are in two parts, and this includes library administrators and practicing librarians' needs. The first was created with program administrators' duties in mind and focused on managing digital reference services, while the second was written

with digital reference practitioners in mind and offered guidance to digital reference practitioners. (Shachaf, 2008b; Shaw and Spink, 2009).

These guidelines recommend appropriate behaviors for professional reference librarians (IFLA, 2005), if the professional reference librarians abide by these guidelines. To achieve a better level of service delivery, these standards should be followed. Additionally, the guidelines establish uniform criteria for evaluating reference services and individual librarians' performance (Shachaf and Horowitz, 2008). In addition, the researchers have discovered that assessing the efficacy of these guidelines through the examination of librarians' adherence to professional standards offers an additional approach to systematically appraise the quality of digital reference services. Additionally, they stated that evaluating the effectiveness of these guidelines by examining librarians' adherence to professional standards provides another method for systematically evaluating the quality of digital reference services. Additionally, they stated that evaluating the effectiveness of these guidelines by examining librarians' adherence to professional standards provides another method for systematically evaluating the quality of digital reference services.

IFLA standards development is influenced by a multitude of variables, including the scope of reference queries, the users' profile, and the institutional rules. Such a simple query as "Email the chapter from this book to me" is unlikely to employ either of the search strategies. Shachaf and Horowitz, (2008) conducted a comprehensive evaluation of virtual reference services in North America, specifically focusing on the extent to which these services adhere to the behavioural guidelines set forth by the Reference and User Services Association (RUSA) and the digital reference guidelines

established by the International Federation of Library Associations and Institutions (IFLA). The study assesses the extent to which virtual reference services, specifically those conducted through e-mail, adhere to professional guidelines. However, it is worth noting that research on the effectiveness of virtual reference services often fails to incorporate these standards as a means of evaluating the success of reference interactions. The neglect of this aspect in previous studies is highly concerning, emphasizing the pressing urgency for conducting this current investigation.

Shachaf and Horowitz, (2008) assesses the extent to which librarians and library professionals adhere to these guidelines in their professional practises. By analysing the adherence levels, the review seeks to provide insights into the effectiveness and impact of these guidelines on the library profession. In this literature review, an analysis was conducted on a dataset consisting of 324 transactions from 54 libraries. The aim of the analysis was to examine the adherence levels to two sets of guidelines and explore potential variations based on request types and usernames. Additionally, the study investigated the impact of utilising different sets of guidelines on institutional rank and whether there was any correlation between user satisfaction and adherence to the guidelines. The findings revealed that both sets of guidelines exhibited low levels of adherence across the libraries surveyed. This suggests a general lack of compliance with the established guidelines within the library context.

Furthermore, the study identified variations in adherence levels depending on the specific request types and usernames, indicating that certain factors may influence the degree to which the guidelines are followed. Interestingly, the analysis also uncovered discrepancies in institutional rank when different sets of guidelines were employed.

This suggests that the choice of guidelines utilised by libraries may have an impact on their overall institutional standing. It is worth noting that further research is needed to explore the underlying reasons for these variations and their potential implications.

Lastly, the study examined the relationship between user satisfaction and adherence to the guidelines. Surprisingly, no correlation was found between user satisfaction and adherence to either set of guidelines. This implies that user satisfaction may not be directly influenced by the level of adherence to established guidelines, highlighting the need for additional factors to be considered in understanding and improving user satisfaction within library settings. This study is similar to the current study in terms of examining the adherence levels to two sets of guidelines (IFLA and RUSA guidelines) and the gap between the existence of these standards and their practical application in assessing the quality reference services provided through traditional and digital means. The current study therefore sought to provide evaluation of these standards as perceived by postgraduate students within the selected university libraries.

Hassanzadeh, Samiei and ZerehSaz (2021) conducted a feasibility study on the implementation of IFLA standards in Iranian public libraries. The study found that to help make the IFLA's guidance more feasible, several suggestions are offered, including revising, and correcting instructional manuals, determining the customer demographics, and organizing a task force of library employees, consultants, librarians, and patrons to define and monitor library activities. It focused on implementing IFLA guidelines in public libraries using a mixed method to gather data

and analyze, making it different from this study which focuses on academic libraries in Nigeria.

2.3.2 Reference Librarians' Behavioral Performance in line with RUSA Reference Service Standard Practice.

While provision of reference services through virtual means lacks the visible and nonverbal cues associated with in-person reference encounters, excellent communication skills are still required to conduct successful reference transactions. Effective reference interview between reference staff and library patrons has always been emphasized as a significant aspect of successful reference service in previous literature.

In their study entitled "The Good, the Bad, but Mostly the Ugly: Adherence to RUSA Guidelines," Maness et al., (2009) examined the complex realm of adherence to the Reference and User Services Association (RUSA) guidelines. The researchers embark on a comprehensive exploration of the various facets of this adherence, shedding light on both positive and negative aspects. Through their meticulous analysis, Maness et al. (2009) provide valuable insights into the challenges and shortcomings associated with the implementation of RUSA guidelines. By examining the adherence to these guidelines, the authors contribute to the existing literature on best practices in reference and user services, ultimately offering a critical evaluation of the current situation in this domain. The study utilized a scoring rubric that was based on the Guidelines for Behavioral Performance of Reference and Information Service Providers, as established by the Reference and User Services Association (RUSA).

The researchers analyzed a total of 106 chat reference transcripts in which a patron's behavior was deemed inappropriate. These transcripts were then compared to a randomly selected sample of 90 transcripts from the same period, in which no instances of inappropriate behavior were identified. By employing this comparative approach, the study assessed the librarians' effectiveness in managing and responding to inappropriate behavior exhibited by patrons during online interactions. In the realm of library services, it has been observed that librarians who cater to patrons exhibiting appropriate behavior tend to exhibit superior performance in certain aspects, as evidenced by a notable improvement in two out of the five key dimensions outlined in the RUSA Guidelines.

This finding highlights the correlation between the conduct of library users and the effectiveness of librarians in fulfilling their professional duties. Through a comprehensive analysis of this relationship, significant insights have been acquired pertaining to the intricate dynamics between librarians and patrons. This examination has effectively illuminated the various factors that play a pivotal role in facilitating optimal service provision within the library environment. When it comes to dealing with patrons who exhibit inappropriate behavior, librarians face unique challenges. In this regard, RUSA released practical recommendations for reference service librarians to help enhance patron–reference staff interaction for both online and in-person reference service (Shachaf and Horowitz, 2008).

RUSA practical reference guidelines was initially focused on traditional reference services when it was first released in 1996, and these guidelines were later modified in 2013 to incorporate recommendations for both remote and in-person reference

services (RUSA, 2020). These standards, according to Maness *et al.* (2009) are now widely accepted and cited in professional literature, although it is certainly unlikely that adherence to these guidelines avoids or minimize interactions with improper behavior of patrons (which was not expressly intended to do), however, it might succeed in doing so in some instances. Additionally, RUSA standards noted that "the reference staff's good or negative behaviors (as perceived by the patron) have a major impact on the failure or success of the reference transaction". RUSA guidelines were adopted as the instrument for evaluating the reference librarians' performance in this study.

Several studies on the application and adherence of reference standards (Zhuo, Love, Norwood, and Massia, 2006; Ronan, Reakes, and Ochoa, 2007; Pomerantz, Luo, and McClure, 2006, Shachaf, and Horowitz, 2008 and Azmi, Noorhidawati and Aspura, 2017) found that only a few have directly analyzed the use of standards in reference services in terms of the reference interview. Similarly, in their study titled "Improving the Virtual Reference Experience: How Closely Do Academic Libraries Adhere to RUSA Guidelines?", Platt and Benson (2010) examine the extent to which academic libraries adhere to the guidelines set forth by the Reference and User Services Association (RUSA).

The study assessed the extent to which academic libraries or their staff members in the United States comply with the Guidelines for Virtual Reference Services established by the Reference and User Services Association (RUSA). The study findings established particular domains that require enhancement in the realm of virtual reference, as well as to uncover the commendable attributes of successful

virtual reference services. In their analysis, the researchers assert that there exists a discrepancy between the RUSA Guidelines and the level of compliance exhibited by various institutions. Most libraries assessed in this study exhibited deficiencies that were inconsistent with the criteria for a satisfactory user experience. Most of the reference encounters examined in this study were found to be lacking in quality, with only a few instances standing out as exceptional.

In addition, several studies have been conducted to compare reference standards with the recommendations put forth by the Reference and User Services Association (RUSA). The ensuing findings highlight some of the key observations made in these studies: The study conducted at the University of Malaya, Kuala Lumpur by Azmi *et al.* (2017) focused on analyzing the behavioral performance of librarians in academic libraries regarding chat reference service. The study examined the perceived importance and actual practice of the Reference and User Service Association (RUSA) Guidelines for Behavioral Performance in the context of chat reference service among academic librarians. The RUSA Guidelines have been widely accepted and utilized as a reference point for evaluating reference interactions.

The researchers conducted a survey to gather data from a sample of 92 librarians. The librarians were selected from six academic libraries in Malaysia, all of which provide chat reference services to their users. The purpose of the survey was to obtain information regarding the librarians' experiences and perspectives on chat reference services in the academic library setting. By administering the survey, the researchers aimed to gain insights into the current practices and challenges faced by librarians in Malaysia who offer chat reference services. In the study, a notable response rate of

84.8 percent was attained, indicating a commendable level of participant engagement. The study reveals a remarkable observation regarding the perceptions of librarians in relation to the importance they ascribe to certain practices. Specifically, it is evident that a significant proportion of librarians tend to rate the perceived importance of these practices higher than their actual implementation in practice. This finding shed light on the potential disparity between librarians' beliefs and the reality of their professional conduct.

In a study titled "Application of Reference Guidelines in Chat Reference Interactions: A Study of Online Reference Skills," Ronan et al. (2007) examined the state of virtual reference transactions and explore the utilization of RUSA standards. This research examined the application of reference guidelines in the context of chat reference interactions, shedding light on the efficacy of online reference skills. The existing body of literature on this topic reveals a scarcity of studies that have undertaken an evaluation of the actual implementation of these interventions in practical settings.

The Reference and User Services Association Guidelines for Behavioral Performance of Reference and Information Service Providers are widely recognized as one of the most prominent sets of guidelines in the field. The study provides a comprehensive overview of a field study conducted on chat reference transactions. The study focuses on a random sample of virtual reference services in various types of libraries, including academic libraries, public libraries, and regional library consortia in the United States. The study examined and analyzed the recorded chat reference transactions to gain insights into the nature and characteristics of these interactions.

The researchers conducted an analysis of transactions and assessed the reference interview in terms of its adherence to established guidelines. The findings suggest that librarians frequently neglect to integrate the established guidelines into their chat reference interactions. The authors express their aspiration that this study will contribute to a greater understanding of the various factors that have the potential to either facilitate or hinder positive reference transactions in an online setting.

In their study titled "Peer review of chat reference transcripts: Approaches and strategies," Pomerantz *et al.* (2006) examines the various approaches and strategies employed in the peer review of chat reference transcripts. The inception of NCKnows, a chat-based reference service, took place in North Carolina during the month of February in 2004. This innovative initiative was designed to foster collaboration among various entities across the state. The review focused on a specific aspect of the comprehensive evaluation effort, namely, the examination of the transcripts derived from a sample of 428 library reference chats logged in the NCKnows Library Program chat sessions. The study reveals that NCKnows librarians exhibit a higher level of engagement with users. However, it is important to acknowledge that this increased engagement does not necessarily translate to a greater level of skill in research or utilization of information sources. This observation prompts further examination of the specific competencies and expertise possessed by both groups, to gain a comprehensive understanding of their respective contributions within the realm of information services.

In the field of reference librarianship, certain personality traits have been identified as highly desirable. These include courtesy, persistence, and passion. Scholars have

conducted studies to explore the impact of these traits on a user's satisfaction with a reference transaction. Surprisingly, findings suggest that the user's relationship with the librarian may play an equally, if not more, significant role in their satisfaction than the actual quality of the librarian's response. This notion has been supported by the research conducted by Pomerantz *et al.* (2006). This study shares similarities with a previous study as it examines the behavioral attributes of reference personnel within the context of the RUSA criteria for assessing behavioral performance. The studies exhibit notable similarities in their design, data collection instrument, and data analysis method.

However, they diverge in terms of study location, population characteristics, and sample size. This study examined the adherence to reference standards among reference librarians in selected Federal Universities in Northeastern Nigeria. The study will focus on understanding the current state of adherence to these standards within the context of reference services provided by librarians in this region. By exploring existing literature on this topic, the review will provide a comprehensive analysis of the research conducted thus far, identifying gaps and areas for further study. The previous study primarily centers on the examination of chat reference services, however, the present study aims to encompass a broader scope by examining both digital and traditional reference services in a comprehensive manner.

2.4 Information Needs of Postgraduate Student and Reference Services

The concept of "information needs" has been a subject of interest and inquiry due to the diverse range of factors that influence individuals' requirements for information. Kumar, (2008) highlights the elusive nature of this concept, as efforts to define,

isolate, and measure information needs have proven to be challenging. In a study titled "Assessing information needs: Tools, techniques and concepts for the internet age" Nicholas, (2003) critically examined the concept of information needs and highlighted a prevalent issue surrounding its definition. He astutely observed that existing definitions of information needs often suffer from ambiguity or excessive complexity. This lack of clarity has led to a common conflation of information needs with information desires and demands in everyday discussion. The study observations shed light on the need for a more precise and universally accepted understanding of information needs to facilitate effective information retrieval and provision.

According to Bopape *et al.*, (2017), the concept of a need is described as an internal cognitive occurrence that transpires solely within the thoughts of the individual experiencing said need. The emergence of the desire for information can be observed when individuals are faced with challenges or when they aspire to engage in specific activities but lack the requisite knowledge. The fulfilment of one's needs is contingent upon the availability and utilisation of pertinent information. In the study conducted by Campbell, (2013), the concept of "needs" is explored and defined as an intrinsic motivational state that influences cognitive processes and behavioural responses. The author emphasises that needs are subjective experiences that drive individuals to engage in specific thoughts and actions. This characterization of needs as an inner motivational state provides a valuable framework for understanding the underlying psychological mechanisms that guide human behaviour.

The acquisition and utilisation of information play a pivotal role in various domains of human existence. From personal endeavours to professional pursuits, the

importance of information cannot be overstated. This fundamental concept has been widely recognised and extensively explored in the literature. Researchers and scholars have delved into the multifaceted nature of information, examining its significance and impact on diverse aspects of human life. In their study entitled "Information Needs and Information Seeking Behaviour: "A Case Study on Students in Private University Library," Kadir and Hussin, (2018) put forth a persuasive assertion regarding the crucial role of information as a fundamental resource within the broader framework of civilization. The study aimed to evaluate the information seeking behaviour of students by examining several key factors. These factors included the types of information sources utilised by students, the specific types of information sought, the level of user awareness regarding information seeking, and the educational resources provided by the SEGi University Library. Through a meticulous examination of various components, the research conducted a thorough and all-encompassing assessment of the information requirements of students and their corresponding actions within the library environment.

In the study, the researchers utilised a questionnaire as a survey instrument to evaluate the participants' perception of their information needs level. The study employed a survey research methodology to investigate the perceptions of 274 students. The findings suggest that SEGi University library should focus on improving its awareness and training initiatives related to the utilisation of library resources, e-resources, and services. The findings of this study indicate that it is beneficial to implement regular programmes aimed at enhancing students' knowledge and skills in utilising the various resources and services provided by the library. Reference services play a crucial role in fulfilling the information requirements of library patrons.

Therefore, it is imperative to ascertain the level of user satisfaction regarding the reference services provided by their library in order to effectively cater to their diverse information requirements.

In their study titled "Information needs of students in Israel," Greenberg and Bar-Ilan, (2014) investigated the information needs of students in Israel. The researchers aimed to understand the specific information needs of these students and shed light on the factors that influence their information-seeking behavior. In a comprehensive examination of a multicultural society, a case study sheds light on the diverse range of sources that students rely on when conducting research for their academic assignments. In this study, the researchers utilized data obtained from a survey administered to a sample of 151 Israeli students enrolled in a university located in Israel. The findings of this study indicate that there exists a notable disparity among various native language groups in terms of their utilization of search engines, engagement with library services, and approaches employed in completing academic assignments.

The implications of the findings suggest that students who are learning in a second language require specific attention from libraries and information services. This is particularly important when the language of instruction and assignment delivery is not the student's first language. The study highlights the special needs of these students and emphasizes the importance of providing targeted support to ensure their success in accessing and utilizing library resources. By recognizing and addressing these unique requirements, libraries can better serve the diverse linguistic needs of their student population. The study holds significant relevance to the current study as it

focuses on the analysis of reference services offered by academic libraries. This study explores the unique requirements of these students and underscores the significance of delivering tailored assistance to facilitate their effective utilization and access to library resources.

Asogwa and Daniel, (2022) investigated the subject matter of information needs and information seeking behaviour among postgraduate students at NILDS. The researchers explored various aspects of this topic, including the sources consulted by these students, the barriers they encountered in their information seeking endeavours, and potential strategies to enhance their overall information seeking experiences.

In the study, Asogwa and Daniel employed a descriptive survey methodology to gather and analyse data. This study focused on the postgraduate students at the National Institute for Legislative and Democratic Studies (NILDS) Abuja as the target population. The researchers employed a random sampling technique to select the respondents for the study and made the deliberate choice to employ questionnaires as their primary data collection method. The study's primary findings revolve around the diverse information needs of postgraduate students, with a particular emphasis on their highest demand for information pertaining to academic pursuits. In their pursuit of knowledge, students employ a diverse range of sources, including textbooks, journals, and the vast expanse of the Internet. However, it is worth noting that their reliance on human resources for information is particularly pronounced.

Several studies have examined the challenges faced by students in fulfilling their information needs. Among these challenges, two prominent factors have been

consistently identified. Firstly, the lack of available space within the library has been found to significantly hinder students' ability to access the resources they require. Secondly, a common difficulty reported by students is their limited understanding of the library's shelf arrangement and classification scheme, which further complicates their search for relevant materials. These findings shed light on the obstacles encountered by students in their pursuit of information, emphasising the importance of addressing these issues to enhance their overall learning experience.

In exploring the strategies aimed at enhancing the information seeking experience of students, several key themes emerged from the students' feedback. These themes include the necessity to augment the availability of crucial books through an increase in the number of copies, the importance of providing library orientation sessions specifically tailored for incoming students, and the potential benefits of expanding borrowers' privileges. These insights, gathered directly from the students themselves, shed light on the various avenues that can be pursued to optimise the information seeking process within educational institutions.

The acquisition of ample information resources is imperative for students to enhance their performance across diverse academic disciplines. In their study, Agosto *et al.*, (2011) emphasise the importance of understanding the informational needs and desires of library patrons to effectively plan and provide high-quality library services. They argue that this understanding is crucial for ensuring the provision of services that meet the expectations and requirements of the patron population. By acknowledging the significance of this aspect, libraries can enhance their ability to deliver services that are tailored to the specific needs and preferences of their users.

The comprehension of these components by librarians enables them to enhance their ability to cater to the requirements and information-seeking patterns of their patrons.

In their study titled "Fulfilling information needs by classifying complex patron needs," Senteio *et al.* (2021) examined the state of public librarianship, aiming to enhance the way in which complex information needs are met. The researchers shed light on the challenges faced by public librarians in addressing these intricate requirements and propose a classification system as a potential solution. In the study, the researchers suggest that librarians can effectively address complex information needs by employing a two-step approach.

Firstly, they propose utilising Warner's classification model to assess the level of complexity associated with the information need. This model, developed by Warner, aids librarians in categorising the degree of complexity, thereby providing a foundation for subsequent actions. Secondly, the researchers suggested implementing Popper's three world theory to anticipate and respond to these complex information needs. By adhering to a set of prescribed steps, librarians can effectively navigate the intricacies of complex information needs, ensuring a comprehensive and satisfactory resolution. This article further provides examples of how public librarians in the United States proactively anticipated intricate information requirements and collaborated with other organisations to effectively provide those needs.

The primary objective of reference services is to effectively identify and rectify any existing information gaps that may be present for their patrons. The primary objective of the reference librarian's reference interview is to extract adequate information from

patrons regarding the specific nature of their information requirements. This enables the librarian to effectively determine the most appropriate reference and information sources within the library that are aligned with the patrons' information needs.

In a study titled "Shall We Get Rid of the Reference Desk?", Miles, (2013) examined the question of whether the reference desk, a traditional fixture in libraries, should be eliminated. The author explores the various arguments surrounding this topic and examines the potential implications of such a decision. By critically analyzing the existing literature and drawing upon empirical evidence, Miles shed light on the ongoing debate and provide valuable insights for library professionals and researchers alike. In the study, the researcher investigated the prevalence of reference services provided from the reference desk in a sample of 119 academic libraries. Specifically, the focus was on universities that offer master's level programs. By examining this aspect of library services, the researchers gained insights into the current practices and trends in reference service provision within the academic library setting. The findings of this study contribute to the existing literature on the provision of reference services.

The findings revealed that a significant proportion of libraries, approximately 66.4 percent, continue to rely on the traditional reference desk to provide reference services. Furthermore, it was observed that a substantial majority, approximately 77.21 percent, of libraries employ a professional librarian at the reference desk either consistently or intermittently. These results shed light on the prevailing practices within the library community regarding the utilization of reference desks and the presence of qualified librarians in this context (Miles, 2013).

The significance of librarians' contributions to the development and understanding of the concept of information needs cannot be overstated. Prior to the mid-20th century, researchers explored the realm of information needs through an indirect approach, primarily by examining the interests and preferences of readers (Abdulkhakova *et al.*, 2021). This method involved analyzing various factors that influenced individuals' desire for information, without directly investigating their specific needs. By examining readers' preferences and predilections, scholars sought to gain insights into the types of information that were sought after during this era. However, this approach did not involve a direct examination of the specific information needs of individuals, but rather relied on understanding the broader patterns and trends that emerged from their interests and preferences.

In their study, Abdulkhakova *et al.* (2021) examined the exploration of information needs among students in the context of developing an electronic educational environment at the esteemed Kazan State Institute of Culture. The study addressed several key issues pertaining to the integration of new information technologies within the educational realm. Firstly, it ascertains and assesses the prevailing attitudes of students towards the utilization of these technologies in the process of learning.

Additionally, it described the array of information sources that students rely upon in their academic pursuits. Lastly, it evaluated the extent to which various components of the electronic educational environment within the institute are employed and their overall efficacy. The study employs a range of empirical research methods, including surveys, comparisons, and analysis of publications and regulatory documents. By employing these rigorous research techniques, the study gathered reliable and valid

data to address the research questions and contribute to the existing body of knowledge in the field. This study explored the information needs of students to enhance their information support system, enhance their engagement in mastering the fundamental educational program, and elevate the overall quality of training for prospective professionals.

The current study shares similarities with a previous study as it examines information needs of postgraduate student and reference services. The studies exhibit notable similarities in their design, data collection instrument, and data analysis method. However, they diverge in terms of study location, population characteristics, and sample size. Consequently, it can be inferred that addressing the information needs of postgraduate students will bolster their information support infrastructure, foster their active involvement in comprehending the core educational curriculum, and heighten the overall level of user satisfaction with the reference services rendered.

In a study conducted by Ismaila, (2019), on the information needs and information-seeking behaviour of postgraduate students at Kwara State University, Malete. The study shed light on the current state of information and knowledge revolution in the 21st century. Ismaila's research investigated the intricacies of how postgraduate students engage with information, highlighting the significance of understanding their needs and behaviours in this rapidly evolving era. By examining the information-seeking patterns of these students, Ismaila contributes to the existing literature on information and knowledge revolution, providing valuable insights into the dynamics of information acquisition and utilisation among postgraduate students. The availability of electronic resources in libraries has significantly increased in recent

years. This development has allowed library patrons to access a wide range of digital materials. The proliferation of information on the Internet has had a profound impact on the information-seeking behaviour and needs of postgraduate students worldwide. With the increased availability of online resources, these students now have access to a vast array of information at their fingertips. This has revolutionised the way they approach their research and academic pursuits.

In the past, postgraduate students relied heavily on traditional methods of information retrieval, such as library visits and physical archives. However, the advent of the Internet has transformed this landscape, providing a convenient and efficient platform for accessing information. The ease of searching for and retrieving relevant materials has significantly enhanced the information-seeking process for these students.

Moreover, the Internet has not only expanded the quantity of available information but also improved its quality. Online databases, scholarly journals, and academic websites have become invaluable sources for postgraduate students, offering a wealth of peer-reviewed and up-to-date research. This has empowered students to engage with cutting-edge knowledge and stay abreast of the latest developments in their field of study. The availability of diverse information in various formats and from multiple databases has been made conveniently accessible in a centralised location. In contemporary society, there exists a wide array of information types and media platforms that present these information, thereby providing numerous options for postgraduate students to choose from (Ismaila, 2019).

This statement highlights the tendency of various groups within human society to rely on contemporary information while disregarding previous data. It suggests that regardless of the specific group being examined, this pattern of behaviour is observed. The assertion implies that these groups prioritise up-to-date information in shaping their actions and decision-making processes, while deeming earlier data as less relevant or useful. In the realm of philosophy, a prevailing emphasis is placed on the acquisition of knowledge through direct and experiential means within the material and physical plane of existence (Ismaila, 2019). This perspective asserts that such a form of information acquisition is deemed as the most appropriate and fitting. The significance of knowledge and information cannot be disputed.

Rosenberg, (2017) explores the concept of "information revolutions" as a framework for understanding the various stages of societal growth. In his study titled "Information Revolutions and Information Needs," Rosenberg claims that society undergoes multiple phases of development, each characterized by distinct information needs. By examining these different phases, Rosenberg sheds light on the evolving nature of information needs within society. Rosenberg states that the public's insatiable thirst for information stands as a pivotal catalyst for the occurrence of information revolutions and the subsequent advancement of civilization.

In her study titled "Information asymmetry and information needs," Ozhereleva, (2017) explores the essence of information needs and presents four distinct models. These models shed light on the various dimensions of information needs and provide valuable insights into the complexities of this phenomenon. By examining the findings of Ozhereleva's research, we can gain a deeper understanding of the

underlying factors that drive individuals' information needs and the implications they have on information asymmetry. This literature review summarizes and analyzes the key concepts and findings presented in Ozhereleva's study, offering a comprehensive overview of the different information needs models proposed. The importance of information is intricately connected to the disparity in the abundance of accessible data. The inherent desire for information stems from the presence of information asymmetry, wherein one party possesses more knowledge or information than another. This asymmetry creates a need to bridge the gap and attain a state of equilibrium. Consequently, the primary objective becomes the reduction of this information asymmetry to fulfil the desire for information.

In their study, Tsvetkov and Tyagunov, (2022) delve into the exploration of information needs within the realm of information. Their study shed light on the intricacies and nuances of information needs, providing valuable insights for scholars and practitioners alike. Through their comprehensive analysis, Tsvetkov and Tyagunov, (2022) offer a fresh perspective on information needs. The presence of information needs is a fundamental aspect of both living information systems and technical systems. The human being, as the central figure in the realm of information, possesses inherent information needs. The assessment of relevance is a crucial aspect in determining the significance of a study. By evaluating the relevance of the research, one can ascertain its importance and applicability within the broader academic discourse. In this study, the researchers provide an overview of different categories of non-information and information needs. They explored the diverse range of requirements that individuals may have when seeking both non-information and information. Numerous studies have substantiated the notion that the presence of a

need serves as a driving force behind human activity and plays a fundamental role in the development of various systems. The study examines the correlation between available resources and the capacity to fulfil one's needs. The determination of conditions for satisfying needs and information needs has been established. This literature review discusses the presence of universal functions, namely signal, motivational, realisation, and evaluative functions. These functions are described, and their significance is explored in the context of human behaviour and cognition. The review provides a comprehensive understanding of these functions and their role in shaping our perceptions, actions, and decision-making processes. By examining existing research and theoretical frameworks, this review sheds light on the fundamental nature of these functions and their implications for various domains of human experience.

2.5 User Satisfaction on the Quality of Reference and Information Services in Libraries.

In Shodele, (2013) study, the author explores the various purposes for which individuals may visit a library. These purposes include borrowing documents, conducting research, utilizing the Internet, studying, and reading within the library premises. The author highlights the diverse range of facilities and services offered by libraries to cater to the needs of their patrons. By examining these different motivations for visiting a library, Shodele sheds light on the multifaceted role that libraries play in supporting individuals' information-seeking and educational endeavors. The user's text clearly articulates their specific objective, thereby setting clear expectations for the desired outcome. The expectation of users in any library setting is to receive a satisfactory level of service that meets their needs and requirements.

According to Adeniran, (2011), user satisfaction is contingent upon the extent to which their expectations are fulfilled by the library. If the library successfully meets users' expectations, they experience a sense of satisfaction. Conversely, if the library fails to meet users' expectations, they become dissatisfied. To effectively cater to the needs and desires of library patrons, it is crucial for librarians to possess a comprehensive understanding of their expectations. In the pursuit of providing library users with exceptional and pertinent services, it becomes imperative to establish an ongoing rapport with them to gain insight into their requirements and aspirations (Shodele, 2013).

The crucial determinant of patron satisfaction with library services lies in the library's capacity to anticipate and integrate user needs into its collection development strategies. The concept of user satisfaction encompasses the overall level of contentment experienced by individuals when utilizing a particular product or service.

However, when considering the specific context of library services, user satisfaction takes on a more focused meaning, specifically referring to the degree of happiness and fulfillment that library users derive from accessing and utilizing library resources. In their study on the "Public library information resources, facilities, and services: User satisfaction with the Edo State Central Library, Benin-City, Nigeria, Iwhiwhu and Okorodudu, (2012) put forth a comprehensive definition of user satisfaction. They conceptualize it as an assessment of the extent to which the information service offered to the user surpasses their initial expectations. By establishing this framework, the authors lay the foundation for understanding the multifaceted nature of user satisfaction in the context of information services. This definition serves as a valuable

reference point for researchers and practitioners seeking to explore and enhance user satisfaction in various domains.

Similarly, in their study on the “Utilization and User Satisfaction of Public Library Services in South-West, Nigeria in the 21st Century: A Survey”, Joy and Idowu, (2014) explore the relationship between a user's satisfaction with a library and its implications for both the user's satisfaction with the library's services and their likelihood of utilizing the library in the future. The authors highlight the significance of satisfaction as a key indicator of user experience and its potential to influence user behavior within the library context. By examining the interplay between satisfaction, and future library usage, the researchers shed light on the multifaceted nature of user perceptions and their impact on library services. Their findings contribute to the existing literature on user satisfaction and provide valuable insights for library administrators and practitioners seeking to enhance user experiences and foster long-term engagement. The examination of the library's personnel, resources, and information infrastructure reveals their collective influence on the satisfaction levels of patrons. Therefore, it can be deduced that the evaluation of the behavioral performance of reference librarians, the quality of reference services provided, and the state of the information infrastructure collectively impact the levels of satisfaction among library users.

In a study conducted by Adeniran (2011) on user satisfaction with academic library services from the perspectives of academic staff and students. The aim was to understand the factors that contribute to user satisfaction and identify areas for improvement. The study uses survey research methods and statistical analysis to

gather and analyse data. The study employed a simple random sampling technique to gather a comprehensive dataset consisting of 283 responses. The findings of the study suggest that user's express satisfaction with the library's provision of assistance for learning and research. Additionally, staff and students perceive the library's treatment of them in a positive light.

Overall, the quality of services offered by the library is regarded as satisfactory. The study contributes to the existing literature on user satisfaction in academic libraries and offers valuable insights for library administrators and policymakers in enhancing the quality of services provided to their users. This study is similar to the current study in terms of exploring user satisfaction with academic library services. The current study therefore sought to provide a deeper evaluation of user satisfaction with reference services in academic library services as perceived by postgraduate students within the selected university libraries.

The inclusion of regular analysis of user satisfaction and feedback on reference services delivery is crucial for the improvement and effectiveness of reference services in academic libraries. By consistently evaluating user perspectives, academic libraries can gain valuable insights into the strengths and weaknesses of their services. This information can then be used to make informed decisions and implement necessary changes to enhance the overall user experience. Therefore, the integration of such analysis is highly recommended for academic libraries seeking to optimise their services and meet the evolving needs of their users (Adeniran, 2011).

In a similar study, Abraham and Sabu (2022) undertook an investigation aimed at assessing the degree of satisfaction among users of the Pontifical Institute of Theology and Philosophy, Alwaye (PIA) Library at Mangalapuzha Campus. The study involved participants who were resident seminarians from St. Joseph Pontifical Seminary in Alwaye. These seminarians were affiliated with the faculty of theology and philosophy. In the study, a substantial number of 152 responses were collected, indicating a commendable response rate. The researchers assessed the level of satisfaction among respondents regarding the library resources and services provided. This result sheds light on the general sentiment towards the library's services, indicating a moderately positive perception among users. The findings of the study revealed that a significant proportion of the participants expressed satisfaction with the operating hours of the library. Moreover, it was observed that the primary motive behind their visits to the library was to consult books and journals.

The reference section of the library emerged as a crucial and heavily utilized area, serving as a primary source of information for patrons. Among the various resources available, the encyclopedia collection stood out as the most frequently consulted and relied upon. The present study shares similarities with the above-mentioned research in terms of its design, data collection instrument, and data analysis method. However, it differs in terms of the population and sample utilized. While both studies aimed to evaluate user satisfaction in libraries, the previous research focused on seminarians from St. Joseph Pontifical Seminary in Alwaye while the current study is focusing graduate students in selected universities in Northeast Nigeria as the target group.

In a study conducted by Onyeisi *et al.*, (2019), on the Evaluation of User's Satisfaction with Reference Services in Selected Federal University Libraries in Southeastern Nigeria, the importance of evaluating patron satisfaction with library services was highlighted. The researchers emphasized that satisfied patrons are more likely to recommend the library to others and remain loyal users. This underscores the significance of assessing the level of satisfaction among library patrons. The assessment of user satisfaction is a crucial aspect when considering the quality of reference services provided to individuals on a consistent basis. The evaluation approach employed plays a crucial role in determining the effectiveness of a library's reference services and pinpointing areas of weakness. In their study, Luo and Buer, (2015) emphasize the importance of reference service assessment as a means of identifying both the shortcomings and strengths of service delivery. By conducting a thorough evaluation, organizations can gain valuable insights that can inform and guide efforts to improve their services. This research highlights the significance of assessing reference services to enhance their overall effectiveness and meet the needs of users more effectively. The assessment of reference service is predominantly dependent on the utilization of user satisfaction surveys, as indicated by Sriram and Rajev, (2014). These surveys serve as a valuable tool in uncovering the genuine sentiments of library patrons towards the various services provided by the reference desk.

2.6 Challenges Experienced by Librarians in Providing Reference Services and Adhering to IFLA and RUSA Standards

In the context of our ever-changing society, the significance of enhancing library services to cater to the demands of current patrons and simultaneously enticing new visitors to engage with libraries is growing in importance. In his study titled

"Challenges in Providing Reference Services in Small Archival Institutions," Preston (2019) investigates the extent to which smaller archival institutions are implementing remote reference services. The study identified the types of remote services that these institutions are utilizing and to shed light on the common challenges faced institutions with varying functions and audiences. The survey was disseminated through the Society of American Archivists Lone Arrangers Forum, as well as cross-posted on the Reference, Access, and Outreach Forum. The composition of the participants in this study exhibited a diverse range of backgrounds, encompassing individuals employed in various archival settings, including museum archives, religious archives, university libraries/archives, and local historical societies. The findings reveal that common obstacles, such as time management and cost, are prevalent across various types of institutions and reference strategies. Specifically, it sheds light on the difficulties they face in terms of time constraints and financial limitations while striving to align their reference services with the evolving preferences of their users. This issue has been acknowledged and addressed in the standards set forth by both the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA).

The IFLA and RUSA standards have been widely recognized as essential frameworks that academic libraries can rely on to ensure the provision of high-quality and standardized reference services to their users. These standards have garnered significant attention and appreciation within the library community due to their ability to establish a solid foundation for the effective delivery of reference services in academic settings (Uutoni, 2018). By adhering to these standards, libraries can enhance their ability to meet the diverse information needs of their users while

maintaining a consistent level of service excellence. The IFLA and RUSA standards, therefore, play a crucial role in guiding academic libraries towards the achievement of their reference service goals and objectives. In spite of the widespread adoption of these standards, it is important to note that certain libraries have not yet achieved complete compliance with them (Uutoni, 2018). The study examines the challenges encountered by academic libraries in providing reference services that align with the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA) standards. One of the primary challenges identified is the issue of staffing and the need for adequate training of library personnel.

In their study, Oladokun and Monyatsi, (2015) examines several key areas of concern regarding reference services. They emphasized the importance of having a well-trained and knowledgeable librarian who can deliver comprehensive and accurate information, in accordance with the guidelines set forth by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA). By highlighting these factors, the researchers, underscores the essential components necessary for successful reference services. The guidelines put forth a recommendation for the implementation of comprehensive and ongoing training programs for library staff, specifically focusing on the most effective methods and approaches in providing reference services. This emphasis on continuous learning aims to facilitate the long-term acquisition and retention of knowledge in this domain.

Uttoni, (2018) in a study titled "Evaluation of digital reference services in academic libraries in Namibia," highlights the importance of ensuring competency among reference librarians. To achieve this, library managers are directed by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA) standards to identify and assign capable members of the library staff to oversee the adherence to reference standards. The study also noted that the presence of limited internet bandwidth posed challenges for both users of reference services and librarians in various libraries. One of the significant issues encountered was the slow internet connections experienced by these individuals. The insufficiency of available bandwidth has been widely acknowledged, particularly in remote areas where a significant number of students, who heavily rely on reference services provided by academic libraries, reside. This literature review centers on the challenges encountered by academic libraries in their provision of services. The present study focuses on the adherence to IFLA and RUSA standards by reference librarians in the provision of reference services. However, the previous research did not explore this specific aspect. The challenges discussed in this study are typical obstacles that researchers may face when collecting data on adherence or non-adherence to IFLA and RUSA reference standards.

Khan *et al.*, (2017) examined the state of virtual reference services through web search engines in academic libraries in Pakistan. The researchers found that these libraries face significant challenges in this area, including lack of skilled personnel and limited access to appropriate resources. Financial constraints further compound these difficulties. The study also revealed that many academic libraries struggle to meet the standards set by the International Federation of Library Associations and

Institutions (IFLA) and the Reference and User Services Association (RUSA), resulting in a lack of standardised reference services. This literature review examines the utilisation of IFLA (International Federation of Library Associations and Institutions) and RUSA (Reference and User Services Association) standards in the provision of reference services, as well as the challenges faced by reference librarians in adhering to these standards. While previous research has predominantly concentrated on either IFLA or RUSA standards individually, this study aims to explore both sets of standards in tandem. In addition, it is worth noting that a significant number of academic libraries face challenges in providing reference services that meet the standards set by the Reference and User Services Association (RUSA) and the International Federation of Library Associations and Institutions (IFLA). These challenges primarily stem from inadequate infrastructures within these libraries.

In their study, Egunjobi *et al.*, (2022) examined reference services in Federal University Libraries in South-West, Nigeria. The researchers highlight the significance of the reference section within a library, emphasising its role in reflecting the overall functionality of the library. By acknowledging the importance of this aspect, the study sets the stage for a comprehensive exploration of the challenges and prospects associated with reference services in the context of Nigerian university libraries. The advent of global technological advancements has presented a myriad of possibilities for enhancing the provision of services in the reference section. This can be achieved through the utilisation of online assistive technologies, expert systems, and various artificial intelligence techniques. In the pursuit of understanding the intricacies surrounding reference services in Federal Academic Libraries located in

the Southwest region of Nigeria, the study has diligently examined the challenges and prospects that lie within this domain.

By delving into the depths of the challenges and prospects associated with reference services in the context of Nigerian university libraries, Egunjobi *et al.*, (2022) shed light on the various obstacles faced by these libraries, as well as the potential opportunities that await them. In this study, the researchers employed a descriptive survey design to gather data on the Reference section staff from three prominent Nigerian universities: the University of Ibadan in Ibadan, Oyo State; Obafemi Awolowo University in Ile Ife, Osun State; and the University of Lagos in Akoka, Lagos. To facilitate data collection, a questionnaire was administered to the staff members through the use of Google Forms. This method allowed for efficient and convenient data collection, ensuring a wide reach and participation from the targeted population.

The findings indicate that face-to-face consultation is the predominant method employed for delivering reference services in libraries. However, it is noteworthy that chatbots and web referencing are not utilised in these libraries. This observation suggests that libraries in Nigeria are lagging in capitalising on the numerous opportunities available for enhancing reference services. The present study aimed to expand and enhance the existing knowledge by examining the extent to which adherence to the International Federation of Library Associations and Institutions (IFLA) and Reference and User Services Association (RUSA) standards is observed. By evaluating adherence to these standards, the study aimed to identify the challenges associated with maintaining adherence.

A study by Bowie (2020) examined the most significant challenges that public libraries currently encounter. Notably, the study highlighted two key areas of concern: reference services and adherence to standards. These challenges were identified as crucial factors influencing the operations and effectiveness of public libraries. The study examines the various challenges that libraries face in providing effective reference services, as outlined by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA) guidelines. The findings of the study highlight several key issues, including funding constraints, the implementation of new safety protocols, dealing with upset patrons, maintaining staff morale, and addressing the needs of underserved and vulnerable populations. These challenges pose significant obstacles to the provision of quality reference services in libraries. The current study shares some similarities with one of the primary goals of the research, which is to provide insights into the difficulties associated with adhering to globally accepted reference standards guidelines.

Specifically, the guidelines that have been established by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA). As a result, the study's focus is limited in terms of both its scope and the content it covers. The present study aimed to expand and enhance the existing knowledge by examining the extent to which adherence to the International Federation of Library Associations and Institutions (IFLA) and Reference and User Services Association (RUSA) standards is practiced. By assessing adherence levels, this study aimed to identify and understand the challenges associated with adhering to these standards.

In a study conducted by Amofah-Serwaa, (2018), on the utilisation of Digital Reference Service (DRS) within academic libraries in Ghana. The study examined the availability of necessary infrastructure and technologies to support DRS implementation, while also identifying the challenges faced in managing and implementing DRS within these academic libraries. Present study aims to provide a comprehensive literature review on the topic at hand. The study used a mixed method design to collect data from a total of 313 participants. The sample consisted of 300 DRS users and 13 library professionals from three different institutions: the University of Ghana (Balme Library), the Kwame Nkrumah University of Science and Technology (Prempeh II Library), and the University of Cape Coast (Sam Jonah Library).

The findings of the study suggest that there is an adequate presence of infrastructure, technologies, and training facilities and programmes that effectively meet the requirements of both DRS librarians and users. The results also indicated that a portion of librarians demonstrated awareness of the Digital Reference Service (DRS), yet displayed a hesitancy to actively participate in utilising the service. The importance of raising awareness among both users and librarians to promote the utilisation of Digital Reference Services (DRS) should be emphasized (Amofah-Serwaa, 2018).

Furthermore, it has been proposed that proactive measures be taken to involve a more significant number of librarians to guarantee prompt and effective resolutions to user inquiries. Consistent with prior research, the current study underscores the significance of libraries implementing thorough policies and guidelines regarding

utilising Digital Repository Systems (DRS). In addition, it highlights the importance of libraries continuously evaluating their digital resource management practices. These findings align with the existing literature, which consistently underscores the significance of proactive measures in effectively managing and maximising the potential of DRS within the academic library.

From reviewed literatures above, the provision of reference services in academic libraries in Nigeria is confronted with various challenges. These challenges arise primarily from the prevailing circumstances of limited financial resources, which necessitate the exploration of alternative approaches to enhance the effectiveness of reference service delivery in accordance with the standards set by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA). In their study, Ovigie and Abdulsalami, (2019) emphasize the financial challenges faced by academic libraries in acquiring information resources. They argue that the current economic climate, characterized by decreasing financial support for libraries and rising prices of information resources and subscription rates, makes it impossible for any academic library to acquire all available resources while also meeting other financial obligations such as recurring and capital expenditures. This highlights the need for libraries to carefully prioritize their resource acquisition strategies to effectively manage their limited budgets.

In the context of Nigerian university libraries, it has been observed that the primary source of financial assistance is derived from the government. This is because a mere ten percent (10%) of the overall recurring annual budget of the parent institutions is allocated to the university libraries (Abubakar, 2011). The insufficiency of funding

has had a profound impact on the operational capacity of university libraries in Nigeria, rendering them unable to effectively deliver practical reference and information services. This dire situation arises from the lack of adequate information materials and facilities, which are essential for the provision of comprehensive and up-to-date resources. Consequently, the limited financial resources allocated to these libraries have severely hindered their ability to meet the diverse needs of students and researchers. In their study, Jacintha and Uzoigwe, (2013) found that the primary purpose for which students utilize libraries is to find a suitable environment for studying.

In their study titled "Institutional budget and impact of internally generated revenue on funding of academic library in a developing economy," Ogunjimi, Bello, and Olaniyi (2018) highlight the persistent challenge of insufficient funding for academic libraries, which hampers the availability of essential information resources. In the realm of academic institutions, it is commonplace for libraries to depend on the allocation of institutional revenues to sustain their operations. This practise ensures that libraries have access to the necessary funds during suitable and accessible timeframes. This study investigated various aspects related to the financial sustainability of academic libraries. Specifically, it sought to determine the proportion of the institutional budget that is derived from internally generated revenue and allocated to the funding of these libraries. Additionally, the study gathers information on the different products and services that contribute to the generation of income for academic libraries.

Furthermore, the study shed light on the various strategies and approaches that academic libraries can employ to generate funds and achieve self-dependence. The research design employed was descriptive in nature, aiming to explore the allocation of institutional budget to the library and the influence of internally generated funds on the operational aspects of the academic libraries under investigation. By utilising this approach, the study provided an overview and analysis of the percentage of budget allocated to the library as well as the impact of internally generated funds on the functioning of these academic libraries. The study was conducted in five Private Universities located in Osun State, Nigeria. The study gathers insights from 24 librarians who served as respondents. By examining the findings of this research, we can gain a deeper understanding of the experiences and perspectives of librarians within the context of private universities in Osun State, Nigeria.

Godwin (2017), examines the influence of grants-in-aid offered by the Tertiary Education Trust Fund (TETFUND) and donations/gifts as effective mechanisms of financial support for academic libraries in Cross River State, Nigeria. The research assesses the effectiveness of these alternative funding sources in sustaining the provision of library services within the region. The researcher developed a modified six-point Likert-type scale questionnaire with the aim of assessing individuals' perceptions regarding the various sources of funding and support for libraries. Specifically, the focus was on grants-in-aid provided by the Tertiary Education Trust Fund (TETFUND) and donations/gifts received from the institutions under investigation.

In this study, a carefully selected instrument was utilised to gather data from a sample of 30 senior management librarians. These librarians were drawn from a total of five academic institutions within the state. The findings highlight the importance of these sources of funding in sustaining the operations and resources of these institutions. In the realm of collection development, it has been observed that librarians have not fully capitalised on the potential benefits offered by this avenue. Despite its potential, librarians have not made sufficient efforts to exploit this avenue in their collection development endeavours.

In the realm of academic librarianship, Nigerian University Libraries encounter a multifaceted challenge that extends beyond financial constraints. Abubakar, (2011) highlights the additional hurdle of information and communication technology (ICT) literacy, which poses a significant obstacle to the effective delivery of reference services in accordance with the International Federation of Library Associations and Institutions (IFLA) and Reference and User Services Association (RUSA) standards. This predicament assumes even greater significance in the context of our contemporary digital era. In their study, Amina and Olise (2015) shed light on the prominent concern that social media poses for reference librarians, namely privacy. By examining the implications of social media usage in the context of reference services, the researchers highlight the potential risks and challenges faced by librarians in safeguarding user privacy. This finding underscores the significance of addressing privacy concerns within the realm of social media, as it directly impacts the role and responsibilities of reference librarians. This section examines various obstacles that may impede progress in the field. These challenges encompass a range

of factors, including limited technological uptake, network-related complications, insufficient expertise, and financial constraints.

2.7 Summary of Research Gaps

Previous studies conducted by Mon *et al.* (2008), Barry *et al.* (2010), Hyde and Tucker-Raymond (2013), and Pomerantz *et al.* (2006) have highlighted a notable gap in the existing body of literature concerning the adherence to reference service standards. This gap specifically pertains to the guidelines established by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA). The available literature exhibits a shortage of comprehensive information regarding the present condition of reference service delivery in Nigerian university libraries, thereby impeding our comprehension of this particular subject matter.

The available scholarly literature on reference services offered in academic libraries, as demonstrated by the research conducted by Hassanzadeh, Samiei and Zerehsaz (2021), Onifade and Sowole (2011), Hussein and Mokhtar (2018), Greenberg and Bar-Ilan (2014), Ochili (2016), and Jacoby and Obrien (2005), highlights a notable research gap pertaining to the identification of various categories of reference services provided by these libraries in accordance with the guidelines established by IFLA and RUSA. Previous scholarly investigations, exemplified by the works of Musangi (2015) and Zanin-Yost (2004), have predominantly centered on the examination of reference service provision. Nevertheless, the studies mentioned above have failed to consider the analysis of in-person reference services, as delineated in the reference standards set forth by the International Federation of Library Associations and

Institutions (IFLA) and the Reference and User Services Association (RUSA). As a result, there exists a notable research gap pertaining to the examination of face-to-face reference services in conjunction with these well-established standards. Previous research on standard reference services and their correlation with technology adoption has produced inconclusive findings and emphasized discrepancies in the factors that impact these services across various geographical areas.

The existing literature on digital reference services has primarily focused on the utilization of various digital interfaces, such as e-mail, web forms, chat, and videoconference, for answering patrons' questions. However, these studies have overlooked the examination of adherence to the reference standards set by IFLA and RUSA in the context of digital reference services. Consequently, there is a notable research gap regarding the understanding and evaluation of how well digital reference services align with the established IFLA and RUSA reference standards in delivering effective reference services.

Moreover, there exists a dearth of research investigating the adherence to RUSA guidelines, particularly concerning chat reference transcripts. Prior research conducted by Zhuo *et al.* (2006), Pomerantz, Luo, and McClure (2006), Ronan *et al.* (2007) and Azmi *et al.* (2017) has primarily centered on the assessment of these transcripts. However, a comprehensive investigation into the extent of adherence to the behavioral guidelines specified in the RUSA guidelines has not been undertaken. Therefore, there is a research gap in understanding the extent to which these guidelines are followed in chat reference interactions. The existing studies have revealed a gap in our understanding of reference service delivery. Specifically, the

research has been limited in terms of investigating only one standard comprehensively. As a result, our knowledge regarding adherence to reference standards is primarily focused on behavioral performance, leaving other aspects unexplored.

Despite the existence of several studies (Riggs, 2002, Akin and Ajayi, 2008; Ogbonna, 2010; Abubakar, 2011; Gavgani, Shokraneh, and Shiramin, 2011; Ifijeh, 2011; Aina, 2012; Jacintha and Uzoigwe, 2013; Amofah-Serwaa, 2018; Ovigie and Abdulsalami, 2019) on the challenges of reference service provisions in academic libraries and adherence to IFLA and RUSA reference standards, there are still research gaps that need to be addressed. These studies have provided valuable insights into the topic, but further research is needed to fully understand and address the complexities and nuances of reference service provisions in academic libraries. Specifically, there is a need for more research that explores the specific challenges faced by librarians in implementing IFLA and RUSA reference standards, as well as the factors that contribute to the adherence or non-adherence to these standards.

Additionally, there is lack of research that examines the impact of these challenges on library users and their information needs. By addressing these research gaps, future studies can contribute to the development of effective strategies and interventions to improve reference service provisions in academic libraries and enhance the overall user experience. Existing research on adherence to IFLA and RUSA reference standards in service delivery has primarily focused on the general challenges encountered by academic libraries, rather than specifically examining the precise challenges associated with adherence to these standards.

Despite the existing literature on the challenges faced in providing digital reference services in academic libraries (Smith, 2001; Coffman, 2002; Hodgson, 2002; Han and Goulding, 2003; Nicholas, 2011;), there remain gaps in the research that need to be addressed. However, it is imperative to conduct additional research to identify and rectify the current deficiencies in understanding pertaining to this subject matter. The current body of research on reference services, influenced by IFLA and RUSA standards, predominantly examines the aspects of both digital and traditional reference services, with limited emphasis on the exclusive exploration of digital reference services. Nevertheless, a research gap exists in the realm of studies that specifically focus on investigating digital reference services in isolation, thereby narrowing down the scope of inquiry.

This study addressed the gaps identified in the existing literature on reference services. Specifically, it focused on examining the current state of reference service provision, the extent to which reference services librarians adhere to the standards set by IFLA and RUSA, and the challenges faced in adhering to these standards in the delivery of reference services. This study addressed the existing research gaps by providing a comprehensive analysis of previous studies conducted in Federal Universities libraries in Northeast Nigeria. It offers a more detailed and precise examination of the specific areas that have been mentioned, thereby contributing to the existing body of knowledge in this field of reference services and librarianship as a whole.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The chapter discusses the research design, study location, population, sampling techniques and size, data collection instruments, pilot study, instrument validity and reliability, data collection methods, data analysis, and ethical and logistical issues.

3.2 Research Design

The study employed a descriptive research design, which enabled the researcher to take a multifaceted approach, quantitative (surveys) and qualitative (interviews) were used to collect, analyze, and describe data about people, organizations, or phenomena. The researcher was able to find undocumented events and hidden patterns in a large population, figure out real-world needs that needed policy or intervention, and understand important parts of new events. (Nishioka and Brock 2017).

Descriptive research design is efficient and effective in collecting descriptive data from population characteristics, availability of resources, current practices, and needs (Aggarwal and Ranganathan, 2019). This approach aids in developing practical concepts and knowledge, as well as a more precise comprehension of the research problem (Kinyua, 2019), which enables the research to supplement quantitative data with qualitative data to eliminate bias from quantitative data. The design provides information from a large population by using samples rather than the entire population. Considering the qualities and applicability of the research strategy, this study used it to enable the researcher to collect necessary data from selected samples and generalize about the population from which the sample was obtained.

This design elicited responses from respondents regarding the availability, application, compliance, and challenges associated with library reference services. The study identified variables that were tested to provide context for the research problem by outlining the variables in focus and allowing for conclusions about the existing relationship in the population.

3.2.1 Variables

Variables refer to the characteristics or qualities of a person or organization that are measured or seen by the researcher to examine and validate them within the context of the individuals or organizations being studied. According to Creswell (2013), variables are the primary concepts that researchers want to collect data on to achieve the objectives of a study.

The study examines several independent variables; including the reference services provided by institutions and their delivery methods, reference standards, and users' information needs. The dependent variable in this study is user satisfaction, which may be influenced by the inclusion of intervening variables. The intervening variables consist of the training of librarians in the provision of reference services, the ICT skills possessed by both reference librarians and users, enabling them to effectively navigate digital reference platforms, and the availability and functionality of infrastructure crucial for efficient service delivery and ensuring user satisfaction. In addition, the proficiency of librarians is instrumental in ensuring customer satisfaction with the services provided. Sufficient funding for training and infrastructure is crucial for the effective provision of services and the adherence to reference standards, which is a fundamental element of ensuring user satisfaction.

3.3 Location of the Study

Nigeria is divided into six geopolitical zones, namely the Northeast, Northwest, North Central, Southwest, Southeast, and South-South, for the purpose of facilitating effective government. The Northeast region is situated in the northern portion of Nigeria, spanning between latitudes 8° and 11° N and longitudes 11.5° and 13.5° E. It encompasses six states, namely Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe. The region in question encompassed a fraction that was slightly smaller than one-third of Nigeria's overall geographical mass, with an estimated population of 23,558,674 individuals, being around 13.5% of the entire population (Nyarko, 2011).

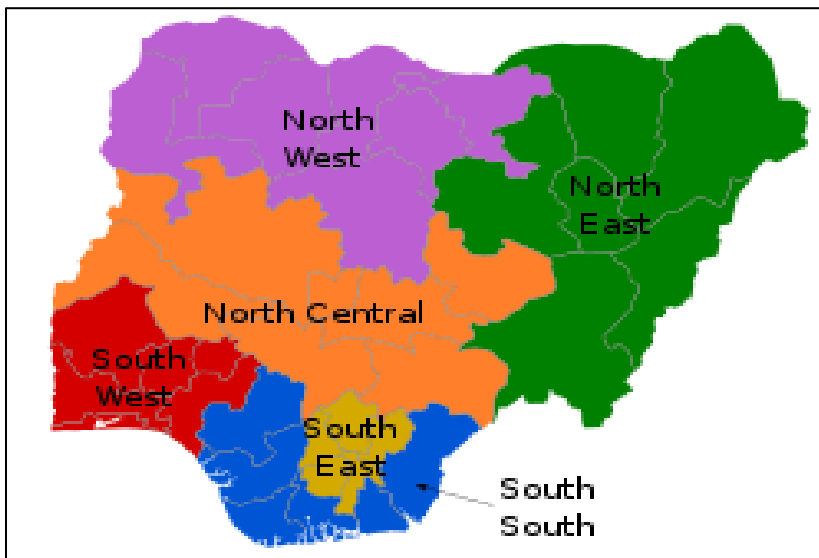


Figure 3.1: Map of Nigeria Showing the Six Geo-Political Zones.

Source: FGN, 2007

The study was carried out in the Northeast region of Nigeria. The Northeast is located in the northern part of Nigeria, consisting between 8° and 11° N and longitude 11.5° and 13.5° E and consists of six states: Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe.

The majority of the literature pertaining to the region has become outdated because of the insurgency that has plagued the area since 2012. There exist a satisfactory number of universities within the region, from which a suitable sample were selected and utilized for the study.

These states contain various institutions of higher education, such as universities, colleges of education, and polytechnics. The present study was conducted at four federal institutions situated in the northeastern region of Nigeria. These universities are Modibbo Adama University of Technology Yola in Adamawa state, Abubakar Tafawa Balewa University in Bauchi state, University of Maiduguri in Borno state, and Federal University Kashere in Gombe state. The selection of these universities was determined by several criteria, including the historical establishment of the institutions, their geographical location, and the involvement in practical research activities, the high student enrolment, and the homogeneity of ownership. It is noteworthy that all four universities were established by the federal government of Nigeria and operate using the same curriculum.

3.4 Target Population

The research population includes many target audiences, which are as follows: Four (4) heads of library services, one from each university under investigation, 91 reference librarians (16 from MAU, 23 from ATBU, 29 from UNIMAID, and 18 from FUK), and 376 postgraduate students (100 from MAU, 105 from ATBU, 110 from UNIMAID, and 61 from FUK). The heads of library services were chosen for this study because they are the service providers in the university libraries and are familiar with the problems and challenges reference librarians face in the course of performing

their duties since they do not interact with the users and reference librarians can be bias in providing information regarding their level of adherence to standards. Heads of libraries are often holders of PhD degrees according to NUC guidelines.

Furthermore, reference librarians are the type of librarians trained and certified with a minimum qualification of Higher National Diploma (HND) and Bachelor degree charged with the responsibility of reference service delivery in order to ensure user satisfaction; and have worked in the university libraries for periods above one year. As a result, they have a deeper understanding of the reference services supplied to users. Some of these reference librarians' possess more beyond the HND and Bachelor degree considered the minimum standard, as some of them are holders of PhD, master and PGDE/PGD respectively.

The rationale behind the selection of postgraduate students lies in their role as active researchers who consistently seek information. Consequently, they are well-positioned to offer valuable insights into the services provided and evaluate the performance of reference librarians based on their day-to-day experiences. The postgraduate students are students enrolled in PhD, master's, and PGDE/PGD programs who regularly used the library to satisfy their information needs in relation to their research from all faculties within the universities under study.

Table 3.1: Target Population Distribution

Institutions	Heads of Library	Reference Librarians	Postgraduate Students
MAU	1	17	100
ATBU	1	24	105
UNIMAID	1	31	110
FUK	1	19	61
Total	4	91	376

Sources: (National Universities Commission, 2020)

3.5 Sampling Techniques and Sample Size

3.5.1 Sampling Techniques

The research utilized a combination of simple random and selective sampling techniques. The researchers employed the simple random sampling technique to choose participants for the administration of questionnaires, specifically targeting reference librarians and postgraduate students. This methodology facilitated the statistical measurement of a specific subgroup of persons, which was chosen from a wider population, in order to estimate the response of the complete group. This approach was adopted due to the substantial size of the population, which consisted of reference librarians and postgraduates from the four institutions.

The researcher employed the purposive sample technique to choose four Federal Universities from the six Federal Universities located in the northeastern region of Nigeria. The purposive sample strategy was utilized to ascertain the most appropriate population for addressing the research inquiry. The Four universities comprised of Adamawa, Bauchi, Borno, and Gombe. These institutions are respectively known as Modibbo Adama University of Technology Yola, Abubakar Tafawa Balewa University, University of Maiduguri, and Federal University Kashere. The selection criteria were established based on the historical era of the universities. To mitigate bias in the selection of respondents from the four chosen institutions, proportional procedures were employed to distribute questionnaires in a manner that reflects the population size of each campus. A census was conducted on the heads of libraries at the chosen institutions for the purpose of the interview.

The sample was determined via Slovin's Formula for sample determination. Slovin's Formula is a statistical tool employed to determine the minimal sample size required for estimating a statistic, considering an acceptable margin of error. The formula developed by Slovin is computed as.

$$n = N / (1 + Ne^2)$$

Where:

n = sample size

N = population size

e = acceptable margin of error

The following were achieved for reference librarians

$$\text{MAU: } n = 17 / (1 + 17 \times 0.05^2) = 17 / (1 + 17 \times 0.0025) = 17 / (1 + 0.04) = 17 / 1.04 = 16.31: n=16$$

$$\text{ATBU: } n = 24 / (1 + 24 \times 0.05^2) = 24 / (1 + 24 \times 0.0025) = 24 / (1 + 0.06) = 24 / (1.06) = 22.64: n=23$$

$$\text{UNIMAID} = n = 31 / (1 + 31 \times 0.05^2) = 31 / (1 + 31 \times 0.0025) = 31 / (1 + 0.08) = 31 / 1.08 = 28.70: n=29$$

$$\text{FUK} = n = 19 / (1 + 19 \times 0.05^2) = 19 / (1 + 19 \times 0.0025) = 19 / (1 + 0.047) = 19 / 1.047 = 18.14: n=18$$

The above-mentioned equation was employed to calculate the sample size, taking into account the universities being investigated, as delineated in mathematical terms. The identical technique was utilized to calculate the distribution of sample sizes between universities within the student population:

$$\text{MAU: } n = 100 / (1 + 100 \times 0.05^2) = 100 / (1 + 100 \times 0.0025) = 100 / (1 + 0.25) = 100 / 1.25 = 80: n=80$$

ATBU: $n = 105 / (1 + 105 \times 0.05^2) = 105 / (1 + 105 \times 0.0025) = 105 / (1 + 0.26) = 105 / 1.26 = 83.33$: n=83

UNIMAID: $n = 110 / (1 + 110 \times 0.05^2) = 110 / (1 + 110 \times 0.0025) = 110 / (1 + 0.28) = 110 / 1.28 = 85.94$: n=86

FUK: $n = 61 / (1 + 61 \times 0.05^2) = 61 / (1 + 61 \times 0.0025) = 61 / (1 + 0.15) = 61 / 1.15 = 53.04$: n=53

3.5.2 Sample Size

The sample size for this study includes four Heads of library services and 91 reference librarians from the four federal universities selected for this research. Modibbo Adama University (MAU) in Yola consisted of one head of library services and 16 reference librarians. The Abubakar Tafawa Balewa University (ATBU) in Bauchi, Nigeria consisted of one head of library services and 23 reference librarians. The University of Maiduguri (UNIMAID) include one head of library services and 29 reference librarians, whereas the Federal University of Kashere (FUK) consisted of one head of library and 18 reference librarians. The range of sample sizes pertaining to reference librarians is succinctly summarized and displayed in Table 3.2.

Table 3.2: Sample Size Distribution for Reference Librarians

S/N	Target Population	Study Population	Sample Size
1	MAU YOLA	17	16
2	ATBU BAUCHI	24	23
3	UNIMAID	31	29
4	FED UNI KASHERE	19	18
	TOTAL	91	86

Source: Study Data 2022

The sample for postgraduate students in this study comprised 302 individuals from four federal universities located in Northeast Nigeria. The sample sizes for the universities MAU Yola, ATBU Bauchi, UNIMAID, and FUK are 80, 83, 86, and 53,

respectively. Table 3.3 provides a summary of the sample size pertaining to post-graduate students.

Table 3.3: Sample Size Distribution for Post Graduate Students

S/N	Target Population	Study Population	Sample Size
1	MAU YOLA	100	80
2	ATBU BAUCHI	105	83
3	UNIMAID	110	86
4	FED UNI KASHERE	61	53
	TOTAL	376	302

Source: Study Data, 2022

3.6 Research Instruments

The study employed primary data collecting instruments to get direct and firsthand information pertaining to the chosen subject matter. The study included both an interview schedule and a closed-ended questionnaire.

3.6.1 Questionnaire

The research employed close-ended questionnaire. The questionnaire was disseminated among individuals enrolled in postgraduate programs and reference librarians in order to gather data using real-time one-on-one method of administering questionnaires. The questionnaires administered to graduate students were categorized into three distinct portions, namely A, B, and C. Demographic data was obtained from the respondents in Section A. Section B included of five items that assessed the reference services offered by reference librarians. The responses obtained from these items were utilized to determine the extent to which the librarians adhered to the IFLA digital reference service standard practice. Section C consisted of five items that assessed the reference services offered by reference librarians. The responses obtained from these items were utilized to derive inferences regarding the extent to which reference service providers comply to the RUSA requirements for behavioral performance.

The items were evaluated on a five-point Likert scale, with the following response options: strongly agree (SA = 5), agree (A = 4), undecided (UD = 3), disagree (D = 2), and severely disagree (SD = 1) (McLeod, 2008). This was conducted in order to ascertain the extent of consensus among the students about the components of IFLA and RUSA guidelines that were employed as the basis for evaluation (refer to Appendix).

The questionnaire administered to reference librarians had five components, namely A, B, C, D, and E. Section A of the survey encompassed the demographic data of the respondents, while Section B had three items that aimed to assess the current state of reference services provided in university libraries. These items specifically examined conventional reference services conducted through face-to-face interactions, digital reference services, as well as the combination of both traditional and digital reference services. The primary objective of section B was to collect data about the nature of reference services offered by reference librarians across different universities. Section C of the study consisted of six items that examined the challenges faced by reference librarians in delivering reference services and adhering to the established standards. Participants were asked to rate their level of agreement on a five-point Likert scale, ranging from "Strongly Agree" to "Strongly Disagree" (McLeod, 2008).

Section D examined additional barriers encountered by librarians in providing reference services and adhering to standards, whereas section E aimed to ascertain the most effective approaches for addressing these highlighted issues. In order to incorporate a distinct perspective and ensure that respondents perceive the items as a cohesive construct (Quilty, Oakman, and Risko, 2006), the items were formulated in a

positive manner (Wolfe and Smith, 2007). Please refer to Appendix III for further details.

The cost of administering questionnaires in a survey is considerably lower, allowing for swift communication with individuals. Additionally, a wide range of structure and forms are available, including genuine and assessment-based options, as well as checkboxes and free text replies. The subject matter exhibits adaptability and is readily available. Despite the potential limitations associated with the use of questionnaires, such as the possibility of obtaining inadequate responses and the absence of direct researcher-participant interaction, this study diligently addressed these concerns by employing a rigorous respondent selection process and enhancing the clarity of the questionnaire to elicit more opinions that are informed. According to Pantou (1990), it is widely observed that individuals have participated in surveys at various stages of their life, and such experiences do not evoke fear or apprehension. Consequently, the researcher concluded that the questionnaire was an acceptable and effective research tool for the study.

3.6.2 Interview Schedule

The interview data on the challenges faced by reference librarians from heads of libraries was collected through a structured interview schedule administered to heads of library services. Subsequently, this data was compared to the data obtained from reference librarians through the utilization of a questionnaire application. The reason of collecting data through this procedure was to gain a deeper understanding of the difficulties encountered by reference librarians in the execution of their professional responsibilities. The purpose of this interview was to gather primary data that may support the quantitative data obtained from reference librarians on the difficulties they

encounter in delivering reference services to patrons. The individuals in leadership positions in libraries are well suited for their roles, as they are responsible for overseeing and providing services. They acknowledge the difficulties associated with reference services. Seven interview items were administered to assess various aspects related to reference librarians and their provision of reference services. These items included an evaluation of the skills and competence of reference librarians in delivering adequate reference services, an assessment of their proficiency in utilizing information and communication technology (ICT), an examination of the training programmes available for reference service librarians, an exploration of the funding situation. In addition, an appraisal of the adequacy of the infrastructure in place, an assessment of the sufficiency of information sources and collection within the library, an investigation into the challenges faced by reference librarians in carrying out their duties, and an examination of the modes of communication adopted by reference librarians in providing reference services. The responses were organized, categorized, and analyzed in order to support the findings obtained from the quantitative data. (See Appendix IV).

3.7 Piloting

Prior to gathering primary data, the researcher did a preliminary examination of all study equipment and analytical methodologies. According to Leddy (2001), this approach is deemed efficacious in assessing the feasibility of a research investigation. This research was conducted to verify the functionality of the developed instruments for their intended purpose. The initial investigation involved 16 participants, comprising 10 individuals who were postgraduate students, 5 individuals who were reference librarians, and the Head of library services. These participants were selected

from the Federal Universities Wukari library. The piloted school is situated within the same study region and is also under the ownership and funding of the federal government of Nigeria. Furthermore, it adheres to the same curriculum as the universities currently under investigation. Following the completion of the pretesting exercise, the collected data underwent descriptive statistical analysis for examination.

The outcomes of the preliminary assessment aided in evaluating the reliability or limitations of the research instrument. The results of the study indicate that the instruments effectively fulfil their intended purpose, with only minor modifications made to the titles and headings. The constructs used to measure the elements of evaluation are in accordance with the student judgement criteria outlined by IFLA and RUSA guidelines. Additionally, the number of items in each section of the instrument has been carefully determined. The interview questions underwent modifications in terms of the quantity of items, the arrangement of questions, and the transformation of questions into more inquisitive inquiries pertaining to the matters being investigated.

3.7.1 Validity

Content validity was determined using five-panel experts. The panel experts were drawn from the field of Library and information science at Kenyatta University. Experts were given copies of the questionnaire, considering the purpose and research questions formulated for the study to indicate essential items, somewhat essential and non-essential for gathering data. The level of acceptance on expert rating an item essential was calculated to determine the content validity ratio (CVR) using Lawshe's (1975) method thus.

$$CVR = ne - \frac{N/2}{N/2}$$

Where $CVR = \text{content validity ratio}$,

$ne = \text{number of experts indicating essential on an item}$,

$N = \text{total number of experts}$.

Decisions were taken using Lawshe's table of minimum values of CVR and CVRt, which must be a minimum of 5% level of agreement at $p = 0.05$ on all items to be retained in the instruments' final copies (Hamed, 2016). If all experts indicate essential for all items on the instruments, CVR is computed to be 1.00 and then approximated to .99 for ease of manipulation (Lawshe, 1975).

Data obtained were subjected to Lawshe's CVR worksheet for computation, and the following CRV's were gained; $0.994 \approx 1$ for the postgraduate students' questionnaire, while one was obtained for the professional Librarians questionnaire. The panel validated the interview schedule since it was not a semi-structured one and was needed to corroborate data gathered from the questionnaire. The CRV's obtained indicated a satisfactory level, and thus, the scale of questionnaires has achieved a satisfactory level of content validity. This means that the items on the questionnaires were valid. Lawshe (1975) recommended that the adjustment from proportion to CVR was significant, as it could be understood whether the degree of agreement among panel experts was beyond 50%. The value of CVR ranges between -1 (faultless disagreement) and $+1$ (impeccable agreement), with CVR values higher than zero, representing that more than half of panel experts concur that an item is essential.

3.7.2 Reliability

The preliminary study was conducted using ten postgraduate students and five reference librarians in Federal University Wukari, North-East Nigeria, which was not initially sampled as part of the sample school for the study. The choice of the piloted

schools was because the school is located in Northeast Nigeria, established and funded by the federal government of Nigeria and uses the same curriculum with the four selected universities under study. The data was generated using both students and reference librarians and was subjected to statistical analysis to determine the internal consistency of the instruments. The Cronbach Alpha technique was applied because it is the most frequently used statistical technique for determining an instrument's internal consistency when it contains items with more than two alternatives (Glen, 2016).

The internal consistency was determined as follows:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum s_y^2}{s_x^2} \right)$$

Where α = Cronbach Alpha

k= Number of items=67

k-1= Number of items minus 1= 66

$\sum s_y^2$ =Sum of the item variance=88.72

s_x^2 = Variance of the total score=716.69

Therefore; $\alpha = \frac{67}{66} \left(1 - \frac{88.72}{716.69} \right) = 0.88948457$ $\alpha = 0.89$

Meanwhile, the data gathered from professional Librarian was subjected to Cronbach alpha after the pilot study as follows.

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum s_y^2}{s_x^2} \right)$$

where α = Cronbach Alpha

k= Number of items=31

k-1= Number of items minus 1= 30

$\sum s_y^2$ =Sum of the item variance=17.12

s_x^2 = Variance of the total score=2.96

Therefore; $\alpha = \frac{31}{30} \left(1 - \frac{17.12}{2.96} \right) = 0.8546729$ $\alpha = 0.85$

The r coefficient $\alpha = 0.89$ and 0.85 show that the instruments were excellent and reliable for data collection. This is consistent with the standard operational coefficient alpha of measuring internal consistency, as pointed out by (LoBiondo-Wood et al., 2014) that the result is usually between 0 and 1 though 0.7 and above was considered reliable for data collection.

3.8 Data Collection Techniques

3.8.1 Questionnaire Administration

The researcher made in-person visits to the selected universities in order to formally introduce himself and the objectives of the study to the appropriate authorities. The purpose of these visits was to establish a structured timeline for the administration of the questionnaire, which would facilitate the collection of data. The questionnaire for reference librarians were issued and collected by research assistants selected and trained from each sampled university. All faculties and departments where postgraduate students participating in the study are enrolled were visited during their respective lecture sessions. The researcher and assistants waited for the lectures to be completed and administer the questionnaires to individual students and waited for them to fill and return. This process took a minimum of 30 minutes for each student.

3.8.2 Interview Schedule

Prior to the interview, the researcher contacted the heads of libraries via telephone and introduced himself and the purpose of calling. Each of the heads of libraries services in the respective universities arranged convenient time for the interview which the research ensure it was conducted same time as agreed by the respective heads of libraries in the respective universities. The interview was done non-proximal in their

respective offices and lasted for 2 hours each. Some of the responses were written by the heads of libraries while some were verbally expressed and recorded by the researcher using an audio device for ease of retrieval and analysis to corroborate the quantitative data from administering the questionnaire.

3.9 Data Analysis

Quantitative statistical tools were applied to analyze data collected from respondents from sampled Universities. Data collected using questionnaires were analyzed using percentages and presented based on the study-specific objectives. In contrast, qualitative data gathered through interview schedule were transcribed, coded in themes, and analyzed alongside the quantitative data obtained. The qualitative data were used to corroborate, support, or refute the results obtained from the quantitative data. Based on the items on the sections of the questionnaires that depicted challenges to effective reference services and presented verbatim according to the exact views of each head of library. The MS Excel 11 was used to analyze data that provided answers to research questions asked across all the study objectives while data presentation was done using graphs, pie charts and tables. Chi-square at $p \leq 0.05$ was used to establish statistically significant relationship between the variable under investigation through the application of MS. Excel 11 statistical package. The essence of establishing statistical significance was to ascertain the relationship between responses from respondents on the level of adherence to IFLA and RUSA guidelines by reference librarians across the universities based on the evaluation made according to their level of satisfaction. The result was interpreted in terms of p-value. P value less than equal to 0.05 indicates statistical significance.

3.10 Logistical and Ethical Considerations

3.10.1 Logistical considerations

The researcher got letters of approval after a successful proposal presentation from the Graduate School of Kenyatta University, Kenya, addressed to the Ministry of Education, Nigerian University Commission, Federal Universities Yola, Bauchi, Kashere and Maiduguri introducing the researcher and seeking permission to carry out the study. The permission was signed by relevant authorities and attached as evidence of adhering to the standard logistical practice of conducting research (*see appendix VI, VII, VIII and IX*).

3.10.2 Ethical Considerations

Conducting research of this sort required approval from the appropriate authorities. The researcher sort authorization from Kenyatta University's Graduate School to collect data. The researcher subsequently sort authorization from other appropriate authorities to comply with established logistical practices for conducting research. The ideals of academic integrity, honesty, and respect for other individuals are spelt out in research ethics (Leddy, 2001). To do this, the researcher consistently acknowledged the usage of other people's work throughout the study through citations and referencing to maintain academic honesty and integrity.

The researcher told participants about the research via a consent/introduction letter (Appendix I). This letter explained why and how they were chosen to participate before requesting their agreement to join, at which point they had the option to accept or decline. Additionally, participants were notified of their ability to withdraw from the study at any point during the trial. The researcher also informed participants of his intention to share study findings with the participating institutions for implementation.

The researcher assured that all responses from participants were treated in the strictest of confidence.

Finally, the researcher presented the findings accurately and comprehensively. This is without purposefully distorting what was discovered or deceiving others about the nature of the discoveries. Under no circumstances did the researcher falsify data to support any conclusion, regardless of how noble it may appear.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings, interpretation, and discussion of the study. It is organized as follows: General and demographic profile of respondents, objectives and research questions: Reference service being offered and the method of delivery in Federal University Libraries in Northeast Nigeria, Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA and IFLA Digital Reference Service Standard Practice, Information Needs of Postgraduate Students in the selected University Libraries, Perception of Postgraduate Students Regarding the Behavioral Performance of Reference Librarians on User's Satisfaction with Reference and Challenges Experienced by Librarians in providing reference services and adhering to these standards. This chapter presents the study findings, interpretation, and discussion under the following themes:

4.2 General and Demographic Information

4.2.1 Response Rate by Institutions

The study administered 388 questionnaires and four interview schedules on reference service standards, adherence to reference service standards and challenges of reference service delivery to four Federal Universities in Northeast Nigeria. Three hundred and eighty three (383) questionnaires were adequately filled and returned with a deficit of 5, and all the four heads of library availed themselves and provided opinion on the subject matter as presented in Table 4.1. Frey (2018) noted that a response rate is the ratio of the number of respondents in a study to the number of mockups asked to participate and provide desired data for the study. In addition,

response rates are regularly used to gauge data quality, and low response rates could affect nonresponse predisposition. Response rates are essential for education appraisals, and low response rates could influence the cogency of estimates, evaluation, and extrapolation in education research.

Table 4.1: Response Rate by Institutions

Questionnaire							Interview Schedule		
Institutions	Postgraduate Students		Reference Librarians				Heads of Library		
	Number Administered	Response Rate (%)	Number Administered	Number Returned	Response Rate (%)	Number Not Returned	Not Returned (%)	Number	Response Rate %
MAU	80	100	16	15	93.75	1	6.25	1	100
ATBU	83	100	23	22	95.65	1	4.35	1	100
UNIMAID	86	100	29	27	93.10	2	6.90	1	100
FUK	53	100	18	17	94.44	1	5.56	1	100
TOTAL	302	100	86	81	94.19	5	5.81	4	100

Source: Study Data, 2022

According to the data presented in Table 4.1, 302 questionnaires were administered to postgraduate students across the universities that were investigated as follows: All the postgraduate students from MAU completed and returned the questionnaires to the researcher. This enables the researcher to acquire a 100% response rate with no deficit from the postgraduate students' sample. 16 questionnaires were distributed to reference librarians working at MAU library, out of the 16 questionnaires, 15 reference librarians completed the questionnaire and returned same to the researcher making a response rate of 93.75% with a deficit of 1(6.25%). Additionally, one interview was conducted with the head of the library and 100% response rate was achieved.

All the postgraduate students from ATBU Bauchi participated in completing the surveys, given rise to 100% response rate while 22 reference librarians out of 23

participated in completing the questionnaires and returned same to the researcher. The study gained 95.65% response rate with a shortfall of 1 (4.35%) who did not respond to the items of the questionnaires. The head of the library of ATBU effectively granted the interview and expressed his viewpoint yielding a 100% response rate. 86 questionnaires were distributed among postgraduate students affiliated with UNIMAID and all of the participants enrolled in postgraduate programs selected for the study completed and submitted the questionnaire providing a 100% response rate with no deficit. However, 27 out of the total 29 reference librarians offered comprehensive opinions with a response rate of 93.10% and a deficit of 2 (6.90%) of reference librarians provided no opinion. The head of the library accepted the interview process by supplying the requisite information providing a 100% response rate.

The data demonstrated in table 4.1 clearly shows that 53 postgraduate students from FUK were given questionnaires and all of them attended to the items of the questionnaires and returned same to the researcher given rise to 100% response rate with no deficit. However, 18 reference librarians were requested to provide opinion on the questionnaire items, only 1 (5.56%) of the reference librarians did not return the questionnaire otherwise 17 reference librarians attended to the items of the questionnaires and the study gained a response rate of 94.44% from FUK.

Additionally, an interview was conducted with the head of the library of FUK, which, the study acquires a 100% from the interview scheduled for the head of library of FUK. Generally, 302 (100%) postgraduate students took part in the study, while 81 (94.19%) of reference librarians across the four universities out of the 86 reference

librarians participated and return a significant response rate of 94.19%. with only one reference librarian opting not to partake (5.81%). The library heads in all the universities promptly adhered to the interview schedule and offered an exceptional perspective with a notable response rate of 100%.

4.2.2 Questionnaire and Interview Response Rate by Category

Data collection in this study involved the use of questionnaires and interviews to gather information from three distinct sample groups. The survey was distributed to a group of professional librarians in order to get their perspectives on library reference service standards. Additionally, graduate students were also surveyed to assess librarians' adherence to these standards in the context of service delivery. A planned interview was conducted with library directors to discuss the problems associated with reference services. The distribution is depicted in Figure 4.1.

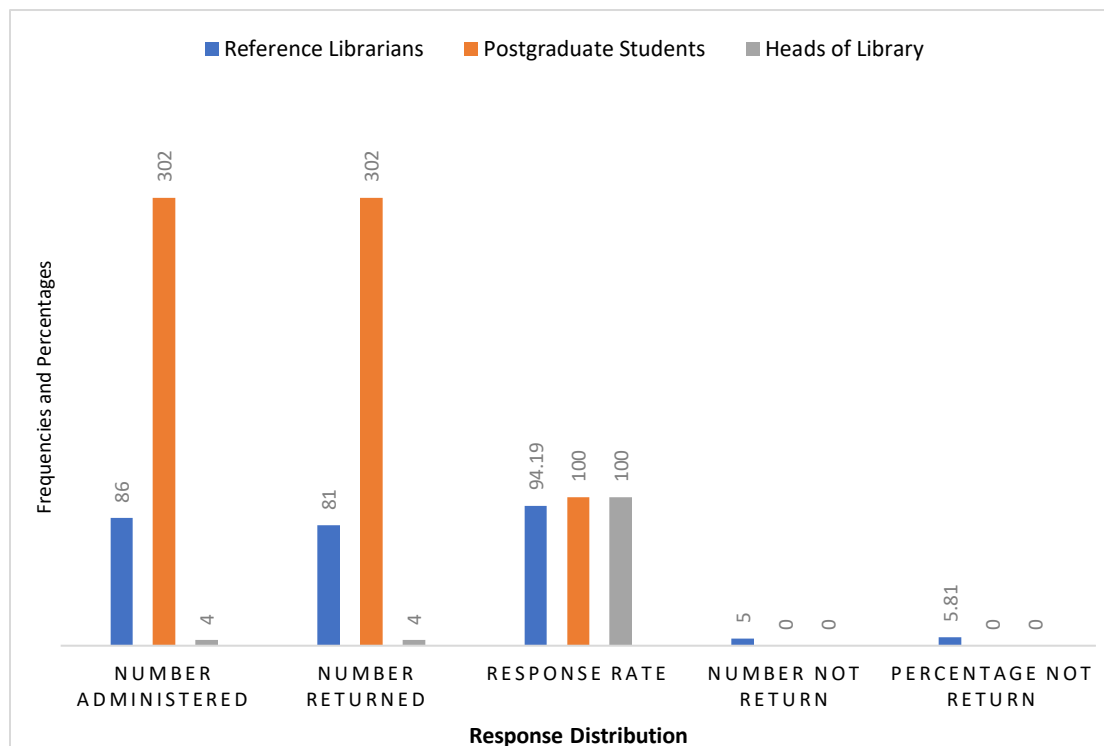


Figure 4.1: Questionnaire and Interview Response Rate by Categories of Respondents

Source: *Study Data 2022*

According to Figure 4.1, 86 questionnaires were distributed to reference librarians to gather information on library reference service standards. The data indicates that 94.2% of the respondents answered the questions, while 5.8% did not provide a response. In addition, 302 questionnaires were distributed to graduate students to assess their perception of librarians' adherence to reference service standards based on their behavioral performance. The questionnaires were designed based on the standard elements outlined in the guidelines that aim to measure student satisfaction. All the graduate students completed and returned the questionnaires accurately. Additionally, the study conducted four interviews with the Heads of libraries, who provided comprehensive and relevant responses.

4.3 Respondents' Demographic Information

4.3.1 Postgraduate Students by Faculty

The study considered postgraduate students as target group in order to establish the nature and multiplicity that exist in the utilization of reference library services. This means that, the library carter for all categories of users irrespective of the department or faculty. 302 postgraduate students distributed across 4 Universities and 7 Faculties were used for the study. The distribution by Faculties is presented in Table 4.2.

Table 4.2: Postgraduate Students by Faculty

s/n	Faculty	MAU	ATBU	UNIMAID	FUK	Frequency	Percentages
1	Agriculture	5	9	9	3	26	8.61
2	Art and Social Sciences	8	3	11	13	35	11.59
3	Education	31	28	23	21	103	34.11
4	Engineering	9	2	9	4	24	7.95
5	Environmental Sciences	7	16	10	5	38	12.58
6	Management Sciences	11	4	11	3	29	9.60
7	Sciences	9	21	13	4	47	15.56
	Total	80	83	86	53	302	100.00

Source: Study Data 2022

The distribution in table 4.2 illustrates number of postgraduate students per university drawn from seven Faculties. The results show that 8.61% participants participated in the study from Faculties of Agriculture across the selected Universities, while 11.59% provided views regarding the subject matter from Faculties of Art and Social Sciences across all the selected Universities. Likewise, few of postgraduate students (34.11%) from Faculties of Education participated in the study by providing desired information on the subject matter. Nonetheless, 7.95% were drawn from Engineering Faculties across the selected Universities, while 12.58% from Faculties of Environmental Sciences were used to obtain necessary information for the study. In addition, 9.60% provided significant opinion regarding the content under study from Faculties of Management Sciences across the selected Universities, 15.56% of the postgraduate students from the Faculties of Sciences across all selected Universities participated fully in the study.

4.3.2 Postgraduate Students by Academic Level of Study

A program of study defines the specific postgraduate program in which a student is currently enrolled at the university during the period of study. Postgraduate programs of study are commonly categorized into three main types: Doctor of Philosophy (PhD), Master's degree, and Postgraduate Diploma in Education (PGDE) or Postgraduate Diploma (PGD), respectively. The study considered this relevant to the study in order to identify the categories of patrons who utilized the library daily for information seeking. The distribution of postgraduate students used for the study is presented in Table 4.3

Table 4.3: Postgraduate Students by Academic Level of Study

s/n	Program	MAU	ATBU	UNIMAID	FUK	Frequency	Percentages
1	PhD	4	7	7	3	21	6.95
2	Master	64	59	61	35	219	72.52
3	PGDE/PGD	12	17	18	15	62	20.53
	Total	80	83	86	53	302	100.00

Source: Study Data 2022

The distribution indicates that 7(7%) are enlisted for PhD program however, 219(73%) are enrolled for master program while, 62(21%) of respondents are postgraduate students enrolled for PGDE/PGD programs. The study examined postgraduate students' program of study, in order to determine the extent to which the library accommodate and provide services to users enrolled for all kind of academic programs in the university.

4.3.3 Academic Qualification of Reference Librarians

The highest level of educational attainment that qualifies the respondents as reference librarians is known as academic qualification. The academic qualification is obtained through training and are commonly categorized into four main types: Doctor of Philosophy (PhD), Master's degree; M.Tech, M.LIS, M.IT, M.IM and Postgraduate Diploma in Education (PGDE) or Postgraduate Diploma (PGD), Also a reference librarian may possess a Bachelor Degree; B.Tech., B.LIS, B.Sc., and B.A respectively. The researcher considered this relevant to the study in order to identify the categories of reference librarians in terms of their educational attainment who provided the information needs of the postgraduate students. The distributions of respondents into various academic qualifications are presented in Table 4.4.

Table 4.4: Academic Qualification of Reference Librarians

Qualification	MAU=15		ATBU=22		UNIMAID=27		FUK=17		TOTAL	
	F	%	F	%	F	%	F	%	Freq.	Percentage
PhD	1	6.67	1	4.55	1	3.7	1	5.88	4	4.94
M.Tech	2	13.33	1	4.55	1	3.7	1	5.88	5	6.17
M.LIS	2	13.33	5	22.73	2	7.41	3	17.65	12	14.81
M.IT	1	6.67	2	9.09	9	33.33	2	11.76	14	17.28
M.IM	2	13.33	1	4.55	4	14.81	1	5.88	8	9.88
PGDE/PGD	1	6.67	2	9.09	1	3.7	1	5.88	5	6.17
B.Tech	1	6.67	2	9.09	1	3.7	1	5.88	5	6.17
B.LIS	2	13.33	5	22.73	5	18.52	3	17.65	15	18.52
B.Sc.	2	13.33	2	9.09	2	7.41	2	11.76	8	9.88
B.A	1	6.67	1	4.55	1	3.7	2	11.76	5	6.17
Total	15	100.00	22	100	27	100	17	100.00	81	100

Source: Study Data, 2022

According to the data presented in table 4.4, it can be observed that total number of PhD holders among the reference librarians used for the study is 4 (44.94%); 1(6.67%) from MAU, 1(4.55%) from ATBU, 1 (3.7%) from UNIMAID and 1 (5.88%) from FUK. The data shows in the master degree category that 5 (6.17%) hold a M.Tech, 2 (11.67%) are from MAU, 1(4.55%) is from ATBU, 1 (3.7%) is from UNIMAID and 1 (5.88%) from FUK. In addition, a total of 12 (14.81%) of reference librarians hold a master's degree in library science (M.LIS) among which 2 (11.76%) from MAU, 5 (22.73%) from ATBU, 2 (7.41%) from UNIMAID and 3 (17.65%) from FUK. 14 (17.28%) reference librarians in total possess master's degree in information technology (M.IT); 1 (5.88%) from MAU, 2 (9.09%) from ATBU, 9 (33.33%) from UNIMAID and 2 (11.76%) from FUK. According to the data, 8 (9.88%) reference librarians hold master's degree in information management (M.IM) among which, 2 (11.76%) is from MAU, 1 (4.55%) is from ATBU, 4 (14.81%) are from UNIMAID and 1 (5.88%) from FUK. The data indicates that, 8 (9.88%) reference librarians have obtained a Postgraduate Diploma in Education (PGDE) or a Postgraduate Diploma (PGD) with 1 (5.88%) from MAU, 2 (9.09%) from ATBU, 1 (3.7%) from UNIMAID and 1 (5.88%) from FUK. Moreover, a portion of the

participants 5 (6.17%) owns a Bachelor of Technology degree with 1 (5.88%) from MAU, 2 (9.09%), 1 (3.7%) from UNIMAID and 1 (5.88%) from FUK. Many reference librarians 15 (18.52%) holds a Bachelor of Library and Information Science degree. This number span across the four universities; 2 (11.76%) are from MAU, 5 (22.73%) are from ATBU, 5 (18.52%) are from UNIMAID and 3 (17.65%) are from FUK. The data reveals that 8 (9.88%) reference librarians particularly 2 (11.76%) are from MAU, 2 (9.09%) from ATBU, 2 (7.41%) from UNIMAID and 2 (11.76%) from FUK hold a Bachelor of Science degree. The data also reveals that 5 (6.17%) specifically; 1 (5.88%) from MAU, 1 (4.55%) from ATBU, 1 (3.7%) from UNIMAID and 2 (11.67%) from FUK, hold a Bachelor of Art degree. Generally, this suggests that the individuals surveyed possess the necessary qualifications and advanced degrees in Library and Information Science (LIS) to offer reference services to library users and make decisions regarding matters that affect the provision of reference services, the library itself, and the librarians working in their respective libraries.

4.3.4 Years of Experience of Reference Librarians

The study considered the years of experience of professional librarians to ensure the viability of the data collected. The study considered period spent providing library reference services in the universities as the years of experience. The year of experience equips the reference librarian with a substantial reservoir of knowledge necessary to effectively address the research inquiry. This varies among librarians based on the year and period of enrolment into the University library services. The distributions of years of experience by professional librarians are presented in table 4.5.

Table 4.5: Reference Librarians' Years of Experience

Years	MAU=15		ATBU=2		UNIMAID=27		FUK=17		TOTAL	
	F	%	F	%	F	%	F	%	Freq.	Percentage
1- 5	4	26.67	6	27.27	10	37.04	4	23.53	24	29.63
6, 10	3	20.00	7	31.82	6	22.22	3	17.65	19	23.46
11, 15	2	13.33	4	18.18	4	14.81	5	29.41	15	18.52
16, above	6	40.00	5	22.73	7	25.93	5	29.41	23	28.4
total	15	100.	22	100	27	100	17	100	81	100

Source: Field Data 2022

The findings presented in table 4.5 reveal that 4(26.67%) of reference librarians from MAU are experienced in providing reference services at the university for 1-5 years. However, there are 3(20.00%) reference from MAU who had spent between 6-10 years attending patrons' queries while, 2(13.33%) have been providing reference services to patrons for about 11-15 years and 6(40.00%) have been actively engaging with patrons in reference service provision in MAU for over 16 years.

Likewise, a good number of professional librarians 6(27.27%) have spent 1-5 years in attending users' information needs in ATBU, 7(31.82%) have 6-10 years of experience in reference services delivery. However, 4(18.18%) of the reference librarians have been providing services to patrons between 11-15 years in ATBU while, 5(22.73%) of the reference librarians are well experienced as they have been attending to users' information needs for more than 16 years.

The data indicates that, 10(37.04%) of reference librarians are experienced in providing reference services to patrons between 1-5years in UNIMAID, about 6 (22.22%) reference librarians have been engaging with users in the course of meeting their information needs. However, 4(14.81%) of reference librarians from UNIMAID have been working as reference librarians between 11-15 years while, 7(25.93%) are

more experienced than the others for they have been providing reference services to users in UNIMAID for over 16 years.

The data in table 4.5 reveals that, 4(23.53%) of reference librarians from FUK are librarians of 1-5 years of experience in reference service delivery, 3(17.65%) have been addressing users information needs between 6-10 years. However, 5(29.41%) are experienced reference librarians for a number of years between 11-15 years while, 5(29.41%) among the reference librarians from FUK are seasoned librarians who have been actively providing reference services to users for over 16 years.

Generally, 24(29.63%) of the reference librarians from MAU, ATBU, UNIMAID and FUK used for the study are librarians with 1-5 years of experience, 19(23.46%) have spent between 6-10 years actively providing reference services to users in their respectively university libraries. However, 15(18.52%) of reference librarians used for the study from the four universities selected for the study have been in practice between 11-15% years while, 23(28.40%) have been working as reference librarians for over 16 years in their respective university libraries. The findings reveal that the respondents have spent some appreciable years in their various libraries and should have sufficient knowledge of the state of their libraries' reference service delivery. Librarians with a more significant years of experience are more likely to be more competent than librarians with fewer years of experience (Aliyu, (2016). Aliyu further emphasized that the effectiveness of library services is determined by the competence and performance of librarians.

4.3.5 Reference Service in Federal University Libraries

The first objective of this study was to examine the reference services provided and their delivery methods in accordance with the RUSA and IFLA Digital Reference Service Standard Practice. According to Research Information Network and Research Libraries UK (2011), the library is the center of scholarly operation within the university community, with the primary responsibility of supplying its patrons with reliable and valuable reference and information services through face-face and digital platforms. To identify the reference services offered in the libraries, librarians were asked to indicate from a list of reference services provided through different platforms such as traditional face-face service platform, digital reference services and the combination of traditional and digital reference service platforms. Out of the 86 reference librarians 81 responded to the items on the list. Data gathered were analyzed using frequency counts and percentages and results are shown in Table 4.6.

Table 4.6: Reference Service in Federal University Libraries

Items n=81	MAU n=15		ATBU n=22		UNIMAID n=27		FUK n=17	
	f	%	f	%	f	%	f	%
Traditional Reference Services								
Information Services	13	86.7	17	77.3	16	59.3	16	94.1
Bibliographic Verification and Documentation	7	46.7	11	50.0	6	22.2	3	17.6
Inter-library Loan and Document Delivery Services	5	33.3	9	40.9	11	40.7	9	52.9
User Education	14	93.3	11	50.0	13	48.1	13	76.5
Reprographic Services.	10	66.7	8	36.4	6	22.2	10	58.8
Digital Reference Services Media								
Email Reference Services	8	53.3	11	50.0	9	33.3	11	64.7
Web form	2	13.3	3	13.6	3	11.1	5	29.4
Ask A Librarian	13	86.7	12	54.5	11	40.7	9	52.9
Chat (using instant messaging (IM) Social Medial Applications)	4	26.7	3	13.6	6	22.2	2	11.8
Videoconferencing	1	6.7	3	13.6	0	0.0	5	29.4
Traditional/Digital Reference	3	20.0	2	9.1	5	18.5	2	11.8
Total		49.2		40.6		29.9		46.6

Source: Study Data 2022

Table 4.6 displays the conventional (face-to-face) reference services offered to patrons. The table verifies the availability of these services at the university libraries. Based on the data presented, it can be observed that FUK has the highest proportion

of 16 out of the 17(94.1%) respondents who confirmed the utilization of traditional information services for providing reference services to patrons. The observed outcome is consistent with the reported findings of ATBU 17 out of the 22(77.3%), UNIMAID 16 out of 27(59.3%), and MAU 13 out of 15(86.7%).

According to the analysis, 7(46.7%) of reference librarians from MAU have confirmed that they offer bibliographic verifications and documentation as a traditional reference service for patrons. The result collected from ATBU, found that 11(50.0%) of the reference librarians have confirmed the presence and usage of bibliographic verifications and documentation in their reference services. The observed outcome exhibits a resemblance to the findings of UNIMAID 6(22.2%) and FUK 3(17.6%), indicating a comparatively lower proportion.

The analysis shows that, only 5(33.3%) of reference librarians surveyed from MAU confirmed that their institution's libraries offer Interlibrary Loan and Document Delivery Services as part of their reference services. The observed outcome aligns with the findings from ATBU 9 (40.9%), UNIMAID 11(40.7%), and FUK 9(52.9%) indicating a comparatively higher percentage. According to the study, it was found that 14 (93.5%) of reference librarians from MAU reported that User Education is a traditional reference service provided in the university library. Interestingly, this percentage differs from the findings from ATBU 11(50.0%), UNIMAID 13(48.1%), and FUK 13(76.5%). The study suggests that the results obtained from various universities show variation in terms of proportion. This indicates that user education is a prominent reference service offered by reference librarians in the chosen universities but at different proportion.

The findings presented in table 4.6 reveals that reference librarians from the selected universities reported the availability of reprographic services as a form of traditional reference service in their respective institutions. The finding however indicated variation in the percentage of responses MAU 10(66.7%), ATBU 8(36.4%), UNIMAID 6(22.1%) and FUK 10(58.8%). The data suggests that the selected universities' libraries provide reprographic services traditional reference services at various degrees to fulfill users' information needs and ensure their satisfaction.

The study's findings indicate that reference librarians have affirmed their provision of traditional face-to-face reference services via digital platforms. The result indicates that 8(53.3%) of reference librarians from MAU reported offering reference services to patrons in the university library via email. This finding aligns with the responses of 11(50.0%) of reference librarians from ATBU and 9(33.3%) from UNIMAID. The result indicates that FUK have reported higher percentages of 11(64.7%), demonstrating a strong affirmation of the utilization of email as a means to offer reference services to patron. In the library in MAU, a small proportion of reference librarians 2(13.3%) have confirmed the availability of Webform as a platform for digital reference services. The obtained result aligns with the findings from ATBU 3(13.6%), UNIMAID 3(11.1%), and FUK 5(29.4%), suggesting a similar pattern of limited availability and provision of digital reference services to patrons via webform. In addition, it was established that 13(86.7%) of reference librarians in the Library in MAU reported that Ask A Librarian platform has been a viable medium for digital reference service that is accessible to users. The result is consistent with the findings obtained from 12(54.5%) of reference librarians from ATBU, 11(40.7%) from UNIMAID and 9(52.9%) from FUK.

A notable level of response was observed among the reference librarians from MAU 4(26.7%) who confirmed the availability and delivery of conventional reference services through Chat, which involves the use of instant messaging (IM) social media applications, during the provision of reference services to patrons. The obtained result exhibits a similarity of 3(13.6%) with the findings of ATBU, 6(22.2%) from UNIMAID and 2(11.8%) from FUK. However, a very small proportion of reference librarians 1(6.7%) from MAU showed alignment with their counterparts from the other selected universities in the study, specifically; 3(13.6%) from ATBU and 5(29.4%) from FUK verify the presence and usage of Videoconferencing as a medium of offering reference services in a digital platform provided to patrons. In contrast, there were no responses from reference librarians at UNIMAID. Generally, 3(20.0%) of reference librarians reported that reference services are provided face-to face and through digital platform to patrons in MAU. This is similar to the reported percentages of 2 (9.1%) of reference librarians in ATBU, UNIMAID 5(18.5%) and 2(11.8%) from FUK held similar opinion.

The study established that traditional (face-face) and digital reference services are offered in Federal University Libraries in Northeast Nigeria. The types of traditional reference services include Information services, bibliographic verification documentation, inter-library loan and document delivery services, user education, and reprographic services. The findings support the findings of Scicluna (2014), who found that the traditional reference desk did not vanish, as some expected, but instead evolved in nature over time, becoming more digital. This led to the evolution of the librarian's function, with one of the goals being to bridge the divide between patrons and information.

For many years, the future of traditional library reference services has been a point of contention. Ford (1986) recommended eliminating the traditional reference desks and reconsidering the services provided by librarians as far back as thirty-six years ago. However, Schulte (2011) found that eliminating conventional reference desk services needs in-depth study, planning, proper and continuous training for frontline service desk workers. Rather than considering eliminating the reference desk, librarians are concentrating on developing new tools and services for clients in the digital era. In today's information society, librarians are developing new cost-effective methods to provide clients with user-friendly services that provide higher-quality outcomes. These findings also supported the findings of Bandyopadhyay and Boyd-Byrnes (2016), who asserted that human-mediated search systems would continue to be required. The finding also agrees with the findings of Kadir and Singh (2015), which revealed that while digital reference services are an effective method of offering modern reference services, many libraries are still experimenting with them.

The study established that, these traditional reference services offered in these selected universities are offered to patrons using digital service platforms such as email, webform, ask a Librarian, chat (using instant messaging (IM) and social media applications) and videoconferencing. Modern-day libraries demonstrate that most conventional face-to-face reference services are available online, and libraries use various online technologies to provide high-quality reference services. These findings confirm those of Khan and Zainab (2016), which state that the Virtual Reference service is an example of such a service that is offered in real-time situations through various modalities, including Instant Messaging, Video Conferencing, Short Message Services, and email. They further emphasized that libraries now use technology that is

more appealing to today's tech-savvy young users, such as social networking tools, to remain relevant in rapidly changing interactive settings. This finding confirms the findings of (Younus and Nadeem (2021), which state that most respondents were aware of the digital reference services provided by their library.

4.5 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA and IFLA Digital Reference Service Standard Practice.

The second objective of this study was to determine the perception of postgraduate students on reference librarians' behavioral performance in line with RUSA and IFLA digital reference service standard practice. Reference guidelines according to IFLA (2005); RUSA (2004), are guidelines recommend for appropriate behaviors for professional reference librarians to achieve a better level of service delivery. Patrons were furnished with items to ascertain their perception regarding the quality of reference service delivery. This allowed the researcher to assess the extent to which librarians adhere to the standards set by IFLA and RUSA. The evaluation encompassed various aspects, including general guidelines, content guidelines, chat guidelines, and chat sessions, which form the core components of IFLA standards. Additionally, the researcher examined the adherence to RUSA standards, which encompass visibility and approachability, interest, listening and inquiring, searching, and follow-up. The study sought to obtain responses from postgraduate students since they often used the libraries and can provide reasonable views on the content under study. All 302 postgraduate students attended to the items of the questionnaire and provided the following results.

4.5.1 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA General Guidelines

The objective of the study was to determine the perception of postgraduate students on reference librarians' behavioral performance in line with IFLA general guidelines. According to Shachaf and Horowitz (2008), the amount of conformity to reference standards varies depending on the type of request specified in both sets of guidelines. Users who get quality reference services from librarians may assess these requirements. The research looked at the behavioral performance of reference librarians using the International Federation of Library Associations and Institutions' (IFLA) general reference criteria to determine users' satisfaction. This investigation concentrated on the sorts of reference services offered by reference librarians at distinct universities. Postgraduate students from the four participating universities completed 302 surveys. The data from this study was analyzed using frequency counts and percentages to answer the study questions about the purpose. Furthermore, the chi-square test was used at a significance threshold of $p < 0.05$ to show statistically significant connections between postgraduate student assessments across the four universities. Table 4.7 summarizes the findings.

Table 4.7: Reference Librarians' Behavioral Performance by Postgraduate Students in linee with (IFLA) General Guidelines

Items	MAU n=80						ATBU n=83						UNIMAID n=86						FUK n=53					
	A		U		N		A		U		N		A		U		N		A		U		N	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1. Reference librarians are dedicated to providing patrons with the most effective help possible.	5	6	5	6	70	88	3	4	11	13	68	82	3	3	3	3	80	93	1	2	4	8	48	91
2. When addressing inquiries from patrons, reference librarians exercise professional politeness and respect.	3	4	7	9	70	88	2	2	3	4	78	94	2	2	12	14	72	84	1	2	7	13	45	85
3. Reference librarians acknowledge receipt of patron queries and respond as soon as possible.	3	4	6	8	71	89	4	5	3	4	76	92	3	3	10	12	70	81	2	4	8	15	43	81
4. Reference librarians establish and adhere to a specified response time policy.	3	4	4	5	73	91	3	4	2	2	78	94	3	3	8	9	72	84	4	8	11	21	38	72
5. Reference librarians use effective search techniques.	6	8	5	6	69	86	3	4	7	8	73	88	6	7	6	7	71	83	5	9	7	13	41	77

A=Adherence, U=Uncertain, N=Non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 1.0646, p=.0000. The result is significant at $p < .05$

Based on the research findings of item 1 presented in Table 4.7 of the IFLA general guideline, it is observed that 5(6%) of the participants acknowledged the display of professional behavior by reference librarians in Modibo Adama University (MAU) Yola. Specifically, these librarians were noted for actively engaging in the pursuit of providing clients with the most efficient assistance during service delivery. In contrast, the findings indicate that a mere 3(4%) of participants from Abubakar Tafawa Balewa University (ATBU) Bauchi reported observing noticeable positive behavior exhibited by librarians. This proportion aligns with the corresponding 3(3%) reported by participants from UNIMAID, suggesting a similar trend across the two institutions. Based on data obtained from a representative sample of 1(2%) of participants from the Federal University Kashere (FUK) Gombi, it can be inferred that patrons express a low level of satisfaction with the behavioral performance of the reference librarians.

The assessment conducted among postgraduate students at the various universities revealed that reference librarians exhibited a low level of adherence to IFLA reference standards, indicating lack of compliance in terms of standard adherence. The findings of this investigation align with the patterns observed in the other selected universities currently undergoing examination. Based on the provided statistical data, a discernible proportion of postgraduate students hailing from diverse universities have expressed reservations or uncertainties. The data reveals that among the surveyed students, 5(6%) of MAU students, 11(13%) of ATBU students, 3(3%) of UNIMAID students, and 4(8%) of FUK students expressed uncertainty regarding the topic under consideration. In a comparative analysis of universities, it was observed that ATBU

exhibited a higher proportion of students who were undecided in their response, in contrast to the other institutions under consideration. Based on the results, it can be concluded that a significant majority of the participants, 70(88%), expressed the perception that MAU reference librarians, as perceived by postgraduate students, exhibit lack of focus in providing optimal support to patrons. According to the data collected, it has been observed that a significant proportion, specifically around 68(82%), of the participants from ATBU have expressed their perception that the librarians in their institution lack commitment when it comes to providing exceptional user support. Based on the collected data, it is evident that a significant proportion of participants from UNIMAID 80(93%) and ATBU 48(91%) reported not receiving any form of assistance from reference librarians.

Based on the data collected on item 2, the study revealed that 3 (4%) of the participants in the MAU study reported that reference librarians consistently exhibit professional civility and respect when addressing patron inquiries. The evaluations of postgraduate schools at other universities were comparable, with smaller proportions observed. The data reveals that ATBU exhibited a modest 2(2%) positive confirmation rate, indicating a relatively lower level of adherence to the IFLA general guidelines on professional politeness and respect during reference service delivery. In contrast, UNIMAID demonstrated a similar proportion of 2(2%) confirming a positive behavioral performance in line with the guidelines. This finding aligns with FUK's corresponding 1(2%) confirmation rate, suggesting a consistent pattern across the universities. The data reveals that a proportion of respondents did not provide a response across the various institutions. Specifically, 7(9%) of respondents from MAU, 3(4%) of respondents from ATBU, 12(14%) of respondents from UNIMAID,

and 7(13%) of respondents from FUK did not reply to the survey. Based on the results, it can be concluded that reference librarians across various institutions demonstrate a notably low level of adherence. Specifically, 70(88%) of participants from MAU in the study exhibited unsatisfactory behavioral performance in delivering reference services. The observed outcome exhibits a resemblance to the findings of 78(94%) of participants from ATBU, indicating a relatively higher proportion compared to the 72(84%) of participants from UNIMAID and the 45(85%) of participants from FUK. Based on these findings obtained from the four universities, it is evident that postgraduate students are not satisfied with the reference services offered by reference librarians in terms of their behavioral performance with regards to exercising professional politeness and respect at their respective institutions. The findings of the study further substantiate the presence of a notable deviation from the International Federation of Library Associations and Institutions (IFLA) general guideline among librarians. This is supported by a substantial proportion of respondents from these universities who reported instances of non-compliance among librarians.

Based on the data analysis on item 3, it was observed that a small proportion, 3(4%), of participants in the MAU reported instances where reference librarians acknowledged the receipt of patron's inquiries and promptly provided responses. The data presented aligns with the reported percentages of 4 (5%) from participants at ATBU, 3(3%) from participants at UNIMAID, and 2(4%) from participants at FUK. The research findings indicate that a notable proportion of students from different universities expressed uncertainty. Specifically, 6(8%) of students from MAU, 3(4%) of students from ATBU, 10(12%) of students from UNIMAID, and 8(15%) of

students from FUK were observed to have expressed uncertainty. Postgraduate students exhibit a significant level of discontentment with respect to the behavioral competence exhibited by reference librarians in terms of acknowledging the receipt of patron's inquiries and promptly providing responses. According to the findings of the study, a significant majority of participants, specifically 71(89%), expressed dissatisfaction with the level of acknowledgment and timely response provided by reference librarians at their respective institutions in relation to patron's inquiries. The findings suggest that the judgements made by participants from various universities demonstrate a significant level of agreement. The analysis reveals that a significant proportion of individuals from ATBU, UNIMAID, and FUK, specifically 76(92%), 70(81%), and 43(81%) respectively, exhibited congruent perspectives. Based on the data analysis, it can be inferred that postgraduate students expressed a predominantly unfavorable perception of reference librarians with regards to their proficiency in acknowledging users' inquiries and delivering timely responses. The present discovery provides evidence that reference librarians demonstrate a notable deficiency in adhering to the overarching guideline established by the International Federation of Library Associations and Institutions (IFLA).

In a similar context on item 4, it is noteworthy to highlight that 3 (4%) of participants from the MAU indicated that reference librarians demonstrate a consistent practice of implementing and adhering to specific response time regulations. The obtained findings align with the responses gathered from other institutions, specifically 3(4%) from ATBU, 3(3%) from UNIMAID, and 4(8%) from FUK. This further reinforces the observed response patterns at MAU. However, it is worth noting that a significant portion of the individuals surveyed demonstrated a sense of uncertainty and chose not

to articulate their viewpoints. The data reveals that a proportion of respondents from different institutions can be categorized as follows: 4(5%) from MAU, 2(2%) from ATBU, 8(9%) from UNIMAID, and 11(21%) from FUK. Based on the survey results, it is evident that a notable percentage of respondents across various institutions have expressed dissatisfaction with the reference librarians' ability to promptly address patron inquiries. The data reveals a consistent trend across the four universities under study. Notably, 73(91%) of participants from MAU, 78(94%) of participants from ATBU, 72(84%) of participants from UNIMAID, and 38(72%) of participants from FUK exhibited this particular pattern. According to the findings of the study, it can be inferred that postgraduate students maintain a negative perception of reference librarians. This perception is primarily attributed to the perceived inadequacy of reference librarians in effectively and promptly addressing inquiries from library patrons. The findings of this study offer substantiation for the claim that reference librarians exhibit a significant inadequacy in adhering to the overarching guideline set forth by the International Federation of Library Associations and Institutions (IFLA).

Based on the findings on item 5, 6(8%) of the participants in MAU expressed their concurrence with the proposition that reference librarians exhibit competence in utilizing efficient search strategies during their provision of services. The obtained confirmation is consistent with the procurement of 3(4%) from ATBU, 6(7%) from UNIMAID, and 5(9%) from FUK, suggesting a notable degree of contentment among postgraduate students from these universities in relation to the reference services provided by the reference librarians. A subset of the participants, comprising 5(6%) from MAU, 7(8%) from ATBU, 6(7%) from UNIMAID, and 7(13%) from FUK, demonstrated a lack of certainty and chose not to furnish a response to the given

inquiry. Based on the findings presented in Table 4.5, a considerable proportion of participants have conveyed their perception that reference librarians exhibit inadequate utilization of search tools while providing assistance to patrons. The data analysis reveals a consistent pattern observed across all four universities that were examined. Significantly, the institutions MAU, ATBU, UNIMAID, and FUK reported higher percentages of deviation from the general guidelines set by the International Federation of Library Associations and Institutions (IFLA). Specifically, MAU reported a deviation rate of 69(86%), ATBU reported a deviation rate of 73(88%), UNIMAID reported a deviation rate of 71(83%), and FUK reported a deviation rate of 41(77%). The findings indicate that there may be room for improvement in the utilization of search techniques by reference librarians when assisting patrons with their queries.

A test of independence was conducted to examine the relationship between participants' assessment of reference librarians' behavioral performance in relation to compliance with the International Federation of Library Associations and Institutions (IFLA) general guidelines. The results obtained from the analysis indicate a statistically significant relationship. The value of χ^2 (12) is 1.0646, which corresponds to a p-value of .0000. This p-value is below the conventional threshold of .05. Therefore, a significant correlation can be observed in the participants' responses regarding the behavioral performance of reference librarians in alignment with the general guideline set by the International Federation of Library Associations and Institutions (IFLA) within the university context. The results suggest that there is a low level of adherence to the IFLA general guideline among the libraries of the

selected universities. Additionally, the respondents expressed dissatisfaction with all of the items that were included in the survey.

4.5.2 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA Content Guidelines

IFLA's overarching objective is to establish, sustain, and uphold the utmost standards that foster exemplary library practices. In accordance with the standards set forth by the International Federation of Library Associations and Institutions (IFLA) in 2014, it is imperative to adhere to these guidelines in order to ensure the provision of a diverse array of styles and subtext. By doing so, the international library community can derive maximum benefit in terms of content. To assess the level of adherence among reference librarians, it is deemed appropriate for the study to evaluate the daily transactions of these students within the library. Data was collected from a sample of 302 postgraduate students, who are considered advanced learners and frequently seek information. Close-ended questionnaires were utilized to gather this data, the responses were then analyzed using frequency counts, and percentages to provide a descriptive summary aligned with the study objectives. Additionally, the statistical relationship between postgraduate students' responses from the different universities in line with the observed behavioral performance of reference librarians was examined using chi-square analysis, with a significance level set at $p < 0.05$. The results are presented in Table 4.8.

Table 4.8: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA Content Guidelines

Items	MAU n=80				ATBU n=83				UNIMAID n=86				FUK n=53											
	A		U		N		A		U		N		A		U		N							
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%						
1. Reference librarians promote information literacy by advising customers on how to locate the answers to their queries.	1	1	2	3	77	96	3	4	4	5	76	92	5	6	6	7	75	87	3	6	4	8	46	87
2. Reference librarians maintain impartiality and refrain from making value judgments about the topic matter.	2	3	7	9	71	89	3	4	2	2	78	94	2	2	4	5	80	93	1	2	10	19	42	79
3. To identify "the actual inquiry" and respond correctly, reference librarians utilize a neutral questioning interview approach.	3	4	4	5	73	91	2	2	7	8	74	89	1	1	1	1	84	98	2	4	11	21	40	75
4. Reference librarians do not use jargon, acronyms and Internet abbreviations (such as BTW, IMHO).	2	3	3	4	75	94	1	1	5	6	77	93	2	2	3	3	81	94	4	8	12	23	37	70
5. All answers are written clearly by reference librarians and are related to the query level (as much as possible).	2	3	5	6	73	91	2	2	7	8	74	89	2	2	5	6	79	92	4	8	6	11	43	81

A=Adherence, U=Uncertain, N=Non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 7.6054, p=.0005. The result is significant at $p < .05$

Source: Study Data 2022

Table 4.8 illustrates the results of adherence to IFLA content guidelines. A very small proportion of respondents 1(1%) agreed that by advising customers on locating the answers to their queries, reference librarians promote information literacy while; few 2(3%) were indecisive. However, most respondents 77(96%) did not agree that reference librarians' advice patrons on locating the answers to their queries in the line of duty there by promoting information literacy in MAU. The result is consistent with findings obtained from ATBU, where only 3(4%) of the participants declare librarians adhere to IFLA content guideline and 4(5%) were uncertain while, majority of the participants 76(92%) identified non-adherence to IFLA content guideline by librarians. Similarly, 6(6%) of the respondents observed librarians from UNIMAID adhere and 6(7%) were uncertain. Majority of the participants 75(87%) observed that reference librarians fail to promote information literacy by advising customers on how to locate the answers to their queries. The results were not different from the ones acquired from FUK where only 3(6%) attested that reference librarians adhere to IFLA content guideline while, 4(8%) were undecided and majority 46(87%) of the participants declare that reference librarians do not to promote information literacy by advising customers on how to locate the answers to their queries.

The study established that, limited proportion of respondents 2(3%) agreed that reference librarians maintain impartiality and refrain from making value judgments about the topic matter in MAU, which appear similar to findings from ATBU 3(4%), UNIMAID 2(2%) and FUK 1(2%). This is in conformity with IFLA content guideline. Although, a certain fraction MAU 7(9%), ATBU 2(2%), UNIMAID 4(5%) and FUK 10(19%) of the participants were uncertain. Majority of the participants

from MAU 71(89%) observed non-adherence to IFLA content guideline by librarians. The outcome did not vary with those from ATBU 78(94%), UNIMAID 80(93%) and FUK 42(79%) where participants confirmed that reference librarians do not adhere to IFLA content guidelines during reference service provision, as they are often partial and do not refrain from making value judgments about the subject matter.

A small segment of the respondents 3(4%) agreed that to identify "the actual inquiry" and give correct responses, reference librarians in MAU utilize a neutral questioning interview approach. In comparison, a fraction of respondents 2(2%) from ATBU, 1(1%) from UNIMAID and 2(4%) from FUK also confirmed adherence to content guideline by librarians in their respective universities. However, 4(5%) from MAU, 7(8%) from ATBU, 1(1%) from UNIMAID and 11(21%) from FUK were generally indecisive on the level of adherence of reference librarians to content guidelines. Majority of the participants from MAU 73(91%) observed non-compliance with IFLA content guideline, as reference librarians do not utilize a neutral questioning interview approach to identify "the actual inquiry" and give correct responses in attending to patrons. This result is in consistence with those obtained from 74(89%) of the participants from ATBU, 84(98%) from UNIMAID and 40(75%) from FUK respectively. This similarity across universities under study confirmed a higher non-adherence rate with low level of adherence across the universities under investigation.

The result indicates a low level of compliance to IFLA content guideline across the universities for instance; 2(3%) of the participants from MAU affirmed that reference librarians adhere more to the content guideline as they do not use jargon, acronyms, and Internet abbreviations (such as BTW, IMHO) in reference service delivery. This

result is in consonance with those of ATBU 1(1%), UNIMAID 2(2%) and 4(8%) from FUK. Generally, the level of acceptability among the participants across the four universities are relatively low. However, certain group of participants across the universities (MAU 3(4%), ATBU 5(6%), UNIMAID 3(3%) and FUK 12(23%)) were uncertain. Meanwhile, an impressive 75(94%) proportion of participants agreed as they have never witness reference librarians provided services without using jargon, acronyms, and Internet abbreviations (such as BTW, IMHO) in MAU. The result is consistent with those of ATBU 77(93%), UNIMAID 81(94%) and FUK 37(70%) were a higher percentage of participants confirmed that reference librarians use jargon, acronyms, and Internet abbreviations (such as BTW, IMHO). This contradicts the prescribed reference service standards by IFLA.

The study found that, few participants 2(3%) attested that all answers are written clearly by reference librarians and are related to the query level in MAU. There is similarity in the pattern of responses by the students from ATBU 2(2%), UNIMAID 2(2%) and FUK 4(8%) respectively. This demonstrates a low level of compliance with IFLA content guideline of providing written answers related to specified patron query. However, 5(6%) from MAU, 7(8%) from ATBU, 5(6%) from UNIMAID and 6(11%) from FUK were uncertain and provided no opinion. The consistency of the results spans through the four universities in terms of non-adherence with higher proportion of participants from MAU 73(91%), 74(89%) from ATBU, 79(92%) from UNIMAID and 43(81%) from FUK respectively attested that reference librarians in their respective schools do not clearly write answers related to the patron's query level. This indicated a higher level of non-adherence to IFLA content guideline by the librarians.

A test of association was calculated to compare the participant's responses on the level of compliance to IFLA content guideline among the university librarians based on the institutions. The results $\chi^2 (12) = 7.6054$, $p=.0005$ is significance at $p < .05$. Therefore, there is a significant relationship in the responses of participants on the level of compliance to IFLA content guideline among the university librarians based on the institutions. The results interpreted the level of compliance to IFLA content guideline as low across the selected universities libraries.

4.5.3 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA Chat Guidelines

According to Berube (2004), digital reference services frequently include the following components: service users, the interface which email, chat, videoconference, web form, etc.), which provide the platform for chat session and prompt response to queries and the information professional that is the librarian. To access the behavioral performance of librarians, 302 postgraduate students provided their views by answering the questions of the close-ended questionnaires based on their experience with reference librarians in the course of service delivery. Frequency counts and percentages were used to answer the research questions while, chi-square statistics at $p < 0.05$ was adopted to establish statistical significance of postgraduate students' responses-based institutions. The results are presented in table 4.9.

Table 4.9: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA Chat Guidelines

Items	MAU n=80						ATBU n=83						UNIMAID n=86						FUK n=53					
	A		U		N		A		U		N		A		U		N		A		U		N	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1. Reference librarians quickly identify themselves when initiating a discussion.	1	1	4	5	75	94	1	1	2	2	80	96	4	5	3	3	79	92	2	4	8	15	43	81
2. Reference librarians reply to chat requests in order of receipt.	1	1	3	4	76	95	4	5	2	2	77	93	2	2	4	5	80	93	4	8	7	13	42	79
3. While searching for patrons' inquiries, reference librarians frequently reassure patrons that they have not been disconnected.	2	3	3	4	75	94	3	4	5	6	75	90	2	2	3	3	81	94	3	6	6	11	44	83
4. Reference librarians create bookmarks for commonly visited websites.	3	4	4	5	73	91	3	4	4	5	75	90	3	3	3	3	80	93	3	6	4	8	46	87
5. Reference librarians use proper spelling, grammar, and capitalization.	2	3	7	9	71	89	2	2	7	8	79	95	3	3	5	6	78	91	4	8	3	7	46	87

A=Adherence, U=Uncertain, N=non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 2.3086, p = .0007. The result is significant at p < .05

Source: Study Data 2022

The results in table 4.9 explain that small section of respondents 1 (1%) affirmed that reference librarians quickly identify themselves when initiating a discussion from MAU while, few 4(5%) respondents were uncertain. However, most of the respondents 75(94%) believed that reference librarians do not quickly identify themselves when initiating a discussion during service delivery in MAU. This result is in consonance with those from ATBU where only 1(1%) affirmed compliance to IFLA chat guideline and few 2(2%) were uncertain while, a significant proportion 80 (96%) of respondents believed that reference librarians do not quickly identify themselves when initiating a discussion during service delivery. About 4(5%) from UNIMAID affirmed adherence to IFLA chat guideline by librarians while, 3(3%) were uncertain and majority of the participants 79(92%) observed non-adherence to IFLA chat guideline which, had no variation to those of FUK where a small portion 2(4%) of the participants equally confirmed adherence to IFLA chat guideline by the librarians. Certain 8(15%) participants were uncertain while, majority 43(81%) of the participants confirmed non-adherence to IFLA chat guideline in their institution. This shows a higher level of non-compliance to the said guideline.

The study found that only 1(1%) of participants from MAU confirmed that librarians reply to chat requests in order of receipt and 3(4%) were undecided. However, majority of the respondents 76(95) had a contrary view that librarians in MAU do not reply to chat requests in order of receipt. In the same vein, the results revealed that, small proportions of respondents 4(5%) were in complete agreement those reference librarians' replies to chat requests in order of receipt in ATBU. Few 2(2%) of the participants were undecided. However, a larger proportion 77(93%) of respondents

disagreed and confirmed that, reference librarians' in ATBU do not reply to chat requests in order of receipt. Similarly, few respondents 2(2%) from UNIMAID agreed that reference librarians adhere to the IFLA standard of chat guidelines. Hence, they reply to chat requests in order of receipt when delivering reference services to patrons while, 4(5%) respondents were uncertain. A significant proportion of the participants 80(93%) affirmed that librarians often fail to adhere to the IFLA standard of chat guidelines. Hence, they do not reply to chat requests in order of receipt when delivering reference services to patrons. The results are consistent to 4(8%) of the respondents from FUK who admitted adherence and 7(13%) who were uncertain while majority of the participants 42(79%) observed non-adherence to IFLA chat guideline by librarians.

The findings further revealed that smaller proportion of the respondents 2 (3%) from MAU concur that reference librarians frequently reassure patrons that they have not been disconnected while searching for patrons' inquiries while; certain respondents 3(4%) were unsure with the level of adherence of reference librarians to IFLA chat guidelines. A significant proportion of respondents 75(94%) declared that reference librarians, while searching for patrons' inquiries, do not observe chat standard guidelines of frequently reassuring patrons that they have not been disconnected in MAU. A significant similarity was observed in other universities under investigation; 4(5%) from ATBU, 2(2%) from UNIMAID and 3(6%) from FUK observed adherence to IFLA standard on chat guideline while few participants from ATBU 5(6%), 3(3%) from UNIMAID and 6(11%) from FUK were uncertain. A lot of the respondents 75(90%) from ATBU, 81(94%) from UNIMAID and 44(83%) from FUK declared that reference librarians, while searching for patrons' inquiries, do not observe chat

standard guidelines of frequently reassuring patrons that they have not been disconnected in their respective universities. This shows an extreme level of non-adherence across the four universities.

Further analysis of the study identified that, a limited number of the respondents 3(4%) from MUA provided that, reference librarians create bookmarks for commonly visited websites to enable easy access by patrons while, 4(5%) respondents provided no opinion regarding the adherence of reference librarians to IFLA chat guidelines. Contrarily, significant numbers of respondents 73(91%) were in support that, reference librarians do not bookmark commonly visited websites. Therefore, they often do not adhere to IFLA chat guidelines in the process of reference delivery in MAU.

Findings of the study is in consonance to those of ATBU 3(4%), UNIMAID 3(3%) and FUK 3(6%) who agreed that reference librarians in their respective universities often create bookmarks for commonly visited websites. Certain portion across these universities provided similar responses; thus, 4(5%) from ATBU, 3(3%) from UNIMAID and 4(8%) from FUK were uncertain. However, majority of the participants (ATBU 75(90%), UNIMAID 80(93%) and FUK 46(87%)) confirmed that librarians in their respective universities do not create bookmarks for commonly visited websites in order to ensure patron's easy access. These results show a higher level of non-compliance to IFLA chat guideline.

The results show that 2(3%) of the participants from MAU agree that reference librarians used proper spelling, grammar, and capitalization in line with IFLA chat

guidelines during reference service provisioning. Although, few respondents 7(9%) were undecided with the level of reference librarians' compliance to IFLA chat guidelines. Almost all the respondents 71(89%) affirmed that reference librarians in MAU do not comply with the IFLA guidelines in using proper spelling, grammar, and capitalization in providing services to the library users. The result-demonstrated similarity to those from 7 (8%) from ATBU, 5(6%) from UNIMAID and 3(7%) from FUK were uncertain. However, majority of the participants 79(95%) from ATBU, 78(91%) from UNIMAID and 46(87%) from FUK confirmed non-adherence across the universities under study.

A test of independence was calculated to establish the relationship between participants' responses across the universities on the behavioural performance of reference librarians in compliance to IFLA chat guideline among the university librarians. The results $\chi^2 (12) = 2.3086$, $p = .0007$ show a statistically significant relationship in the responses of respondents regarding the level of compliance to IFLA chat guideline among the university librarians. The results demonstrated similarity in reference service provisions in compliance to IFLA chat guideline; therefore, there is low level of compliance to IFLA chat guideline across the selected universities libraries.

4.5.4 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA Guidelines for Chat Sessions

According to Pomerantz *et al.* (2006) there is inadequacy in reference services via chat, as well as a link between reference services and library user satisfaction where. Most reference librarians sometimes skipped sessions such as chats in academic and public libraries. Item of the questionnaires were distributed to 302 to indicate areas

they feel satisfied with the reference services provided by librarians across the universities, to enable the researcher to deduct the level of compliance to IFLA guideline on chat session. Data collected was analyzed using frequency counts and percentages to answer the research questions that guide the study objective while, chi-square at $p < .05$ was applied to determine statistical significance of the outcome between members of reference librarians across the selected universities, The findings are displayed in table 4.10.

Table 4.10: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with IFLA Guidelines for Chat Sessions

Items	MAU n=80				ATBU n=83				UNIMAID n=86				FUK n=53											
	A		U		N		A		U		N		A		U		N							
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%						
1. Before replying, reference librarians allow the patron to describe his or her information requirement thoroughly.	1	1	8	10	74	88	1	1	2	2	80	96	1	1	5	6	80	93	4	8	5	9	44	83
2. Reference librarians use open-ended inquiry methods to urge patrons to elaborate on their requests.	2	3	6	8	75	89	4	5	4	5	75	90	1	1	4	5	81	94	3	6	7	13	43	81
3. When feasible, reference librarians explain the search procedure to the patron and summarize the results.	2	3	7	9	74	88	1	1	3	4	79	95	1	1	3	3	82	95	1	2	11	21	41	77
4. In the event of a recommendation, reference librarians provide the patron with comprehensive information on whom to ask, how to reach them, and what to ask.	7	9	3	4	70	83	6	7	3	4	74	89	4	5	2	2	80	93	1	2	5	9	47	89
5. When a patron's behaviour is improper (as judged by institutional standards), reference librarians would either deliver a prepared warning message or disconnect the connection.	4	5	4	5	72	86	3	4	5	6	78	94	3	3	3	3	80	93	3	6	9	17	41	77

A=Adherence, U=Uncertain, N=Non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 6.7234 p= .0001. The result is significant at $p < .05$

Source: Study Data 2022

The result in table 4.10 demonstrates that few respondents 1(1%) identified that before replying, reference librarians in MAU allow the patron to describe his or her information requirement thoroughly in line with IFLA chat session guideline. The result is consistent to those of ATBU 1(1%), UNIMAID 1(1%) and FUK 4(8%) who affirmed librarians in their respective schools adhere to IFLA chat session guideline. However, limited proportions across the universities for instance 8 (10%) from MAU, 2(2%) from ATBU, 5(6%) from UNIMAID and 5(9%) from FUK were undecided. However, most of the respondents 74(88%) from MAU, 80(96%) from ATBU, 80(93%) from UNIMAID and 44(83%) from FUK indicated that reference librarians did not allow the patron to describe his or her information requirement thoroughly identify before replying, this clearly indicate lack of adherence to the IFLA chat session guidelines. This result is consistence across the four universities, which means there is a higher level of non-adherence to IFLA chat session guideline by reference librarians.

The results show that certain proportion of participants 2(3%) agreed that reference librarians in MAU often follow IFLA chat session guidelines during reference services delivery to patron reference librarians often use open-ended inquiry methods to urge patrons to elaborate on their requests. The result is consistent across the selected universities with similar proportion of participants. For instance, 4(5%) from ATBU, 1(1%) from UNIMAID and 3(6%) from FUK were certain that reference librarians adhere to IFLA chat session guideline in service delivery. Few of the participants 6(8%) from MAU, 4(5%) from ATBU, 4(5%) from UNIMAID and 7(13%) from FUK were uncertain. While majority of the participants; 75(89%) from

MAU, 75(90%) from ATBU, 81(94%) from UNIMAID and 43(81%) from FUK observed that reference librarians often do not use open-ended inquiry methods to urge patrons to elaborate on their requests. The consistency of the result across the four universities under study affirmed a high level of adherence to IFLA chat session guideline based on reference librarians' method of inquiry.

The study established that, 2(3%) of the respondents from MAU confirmed that reference librarians explain the search procedure to the patron and summarize the results when feasible in conformity to IFLA chat session guidelines. The similarity of the result span through the other universities as only 1(1%) from ATBU, 1(1%) from UNIMAID and 1(2%) from FUK affirmed that reference librarians explain the search procedure to the patron and summarize the results when feasible in conformity to IFLA chat session guidelines. Few of the participants 7(9%) from MAU, 3(4%) from ATBU, 3(3%) from UNIMAID and 11(21%) from FUK were uncertain and did not respond. While majority of the participants 74(88%) from MAU, 79(95%) from ATBU, 82(95%) from UNIMAID and 41(77%) from FUK disagreed with the statement and indicated that reference librarians do not explain the search procedure to the patron or summarize the results when feasible as outlined in the IFLA chat session guideline. The universality of the responses from the participants across the universities under investigation is a confirmation that the level of adherence to IFLA chat session guideline in terms of librarians' enlightening patrons on search procedure is extremely low.

The result indicates that, limited number of respondents 7(9%) from MAU acclaimed that reference librarians comply with IFLA chat session guidelines in providing

reference services to patrons by making available to patrons a comprehensive information on whom to ask, how to reach them, and what to ask in the event of a recommendation. This result is in consonance to those of 6(7%) participants from ATBU, 4(5%) from UNIMAID and 1(2%) from FUK. Few of the participants 3(4%) from MAU, 3(4%) from ATBU, 2(2%) from UNIMAID and 5(9%) from FUK were uncertain and did not respond. Majority of the participants from all the universities under study express similar response with regards to the item on making available to patrons a comprehensive information on whom to ask, how to reach them, and what to ask in the event of a recommendation; thus, 70(83%) from MAU, 74(89%) from ATBU, 80(93%) from UNIMAID and 47(89%) from FUK disagreed with the statement that reference librarians provide patrons with comprehensive information on whom to ask, how to reach them, and what to ask in the event of a recommendation. The centrality of the responses across the four universities from participants is an indication that the level of adherence to IFLA chat session guideline by reference librarians based on providing comprehensive information on how patron should navigate in search of desired information is generally low across the four universities.

The analysis shows that, 4(5%) of participants from MAU indicated that reference librarians either deliver a prepared warning message or disconnect patrons who displayed improper behavior as judged by institutional standards. The result is consistent with those of ATBU 3(4%), 3(3%) from UNIMAID and 3(6%) from FUK confirmed reference librarians either deliver a prepared warning message or disconnect patrons who displayed improper behavior as judged by institutional standards in line with the IFLA chat session guideline. 4(5%) of respondents from

MAU were uncertain alongside 5(6%) from ATBU, 3(3%) from UNIMAID and 6(9%) from FUK also provided no opinion. The majority of the respondents 72(86%) from MAU, 78(94%) from ATBU, 80(93%) from UNIMAID and 41(77%) from FUK confirmed that reference librarians failed to adhere to IFLA chat session guidelines during service delivery either by not delivering a prepared warning message or disconnecting the connection with a patron who exhibits improper behavior as judged by institutional standard, these views confirmed a very low level of adherence to IFLA chats session guideline.

A test of significance was calculated to determine the relationship between the responses of participants across the universities on the level of compliance to IFLA chat session among the university librarians based on the institutions. The results $\chi^2(12) = 6.7234$ $p = .0001$ is significant at .05 level of significance. Hence, there is a significant relationship in the responses of respondent on the behavioral performance of reference librarians in compliance to IFLA chat session among the university librarians.

4.5.5 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Visibility/Approachability

RUSA released practical recommendations according to Shachaf and Horowitz, (2008) for reference service librarians to help enhance patron–reference staff interaction for both online and in-person reference services. Item of the questionnaires were administered to postgraduate students, which all 302 participants responded to the items of the questionnaire in order to indicate areas of successful interaction with the information agents on RUSA guideline on visibility and approachability. Data collected was analyzed using frequency counts and percentages to answer the research

questions outlined from the objective while, chi-square at $p < 0.05$ was applied to establish statistically significant association of the mode of interaction between patrons and librarians across the selected universities, the results are presented in table 4.11.

Table 4.11: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Visibility/Approachability

Items	MAU n=80						ATBU n=83						UNIMAID n=86						FUK n=53					
	A		U		N		A		U		N		A		U		N		A		U		N	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1. Reference librarians' welcome patrons with a warm greeting to start a discussion.	6	8	50	63	24	30	4	5	1	1	78	94	3	3	3	3	80	93	3	6	2	4	48	91
2. At times, reference librarians walk around the reference or public areas, assisting customers.	7	9	30	38	43	54	3	4	3	4	77	93	4	5	3	3	79	92	2	4	4	8	47	89
3. Reference librarians assist patrons in the beginning stages of their search and then move on to assist other patrons. Offers further help if necessary.	10	13	5	6	65	81	1	1	4	5	78	94	5	6	3	3	78	91	2	4	1	2	50	94
4. Whether the reference desk has been left unattended, reference librarians will regularly check to see if any customers are waiting for help. When demand is high, seek assistance from other staff members.	5	6	5	6	70	88	3	4	4	5	76	92	4	5	2	2	80	93	3	6	2	4	48	91
5. Reference librarians promptly address remote inquiries.	3	4	6	8	71	89	3	4	5	6	78	94	3	3	1	1	83	97	6	11	3	6	44	83

A=Adherence, U=Uncertain, N=Non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 1.8714= p = .0003. The result is significant at $p < .05$

Source: Study Data 2022

The data provided in Table 4.11 indicates that there is a relatively low percentage of participants from MAU 6(8%), ATBU 4(5%), UNIMAID 3(3%), and FUK 3(6%) who reported that reference librarians in their respective institutions greet patrons with a warm welcome to initiate a discussion regarding reference services, in accordance with the approachability guideline of service delivery set by RUSA. The data reveals that a majority of respondents, 50(63%) from MAU, expressed uncertainty regarding the matter in question. A smaller percentage of respondents, 1(1%) from ATBU, 3(3%) from UNIMAID, and 2(4%) from FUK, also expressed uncertainty. The data reveals that 24(30%) of respondents from MAU reported that reference librarians in their institution do not provide a warm greeting to patrons when initiating a reference service discussion, which is not in line with the RUSA approachability guideline for reference service delivery. In contrast, it is noteworthy that a substantial majority of participants, specifically 78(94%) from ATBU, 80(93%) from UNIMAID, and 48(91%) from FUK, expressed their agreement that reference librarians in their respective institutions do not extend a warm greeting to patrons as a means of initiating a discussion regarding reference services. This finding is significant as it indicates a deviation from the recommended approachability guideline for reference service delivery outlined by RUSA. The results of the study indicate a significant deviation from the recommended RUSA guidelines pertaining to approachability. The investigation revealed that a notable proportion of respondents from each of the four universities expressed a lack of proficiency in greeting users with a warm and friendly approach.

Based on the findings presented in table 4.11, it can be observed that about 7(9%) of the participants from the Modibo Adama University (MAU) reported receiving frequent assistance from reference librarians. This assistance primarily involved aiding users who encountered challenges in locating relevant information due to their frequent movement. The data indicates that there is a consistent trend across three institutions 3(4%) for ATBU, 4(5%) for UNIMAID, and 2(4%) for FUK. These findings suggest that reference librarians at these institutions are actively involved in providing support to patrons in various areas of the library. A comprehensive analysis of the data reveals that a relatively small proportion of participants exhibited uncertainty regarding the matter under investigation. Specifically, 30(38%) of participants from MAU, 3(4%) from ATBU, 3(3%) from UNIMAID, and 4(8%) from FUK expressed uncertainty. The data reveals that a significant proportion of respondents from MAU 43(54%), ATBU 77(93%), UNIMAID 79(92%), and FUK 47(89%) expressed that reference librarians in their respective institutions do not actively engage with patrons in the reference or public areas, aligning with the RUSA approachability guidelines during service delivery. The uniformity of the findings across multiple universities suggests a lack of adherence to the RUSA guidelines, which outline the expectation for librarians to be readily available to help users requiring support.

The findings of the study revealed that a total of 10(13%) of respondents agreed with the statement that reference librarians provide assistance to patrons at the initial stages of their search and subsequently move on to assist other patrons, in accordance with the approachability standards set by the Reference and User Services Association (RUSA) for delivering services. The obtained results exhibit a resemblance to the

outcomes reported by ATBU, with a marginal difference of 1(1%). Additionally, the findings indicate a 5(6%) variation from UNIMAID and a 2(4%) deviation from FUK, respectively. A comparative analysis of the data reveals that a relatively smaller percentage of users from MAU 5(6%), ATBU 4(5%), UNIMAID 3(3%), and FUK, 1(2%) respectively, did not furnish feedback pertaining to the subject matter under consideration. In a comparative analysis, a significant majority of respondents 65(81%) from the MAU indicated that reference librarians do not provide initial assistance to patrons and subsequently shift their attention to other patrons or provide additional assistance as needed. The obtained results demonstrate consistency with the findings of ATBU, UNIMAID, and FUK, which reported percentages of 78(94%), 78(91%), and 50(94%) respectively. These findings further support the assertion mentioned earlier. The findings from the analysis of data collected from the four universities under investigation indicate that there is a notable lack of adherence to the RUSA approachability guideline. This lack of adherence is consistent across all four universities, suggesting a general trend of low compliance with the guideline.

Based on the findings presented in table 4.11, it can be observed that a mere 5(6%) of respondents from the MAU reported that reference librarians in their institution consistently engage in the practice of monitoring the reference desk to determine if it has been left unattended. This proactive approach aims to identify instances where patrons may be waiting for assistance and subsequently seek aid from other staff members during periods of high demand. The obtained results exhibit a strong correlation with the results obtained from ATBU 3(4%), UNIMAID 4(5%), and FUK 3(6%). The data indicates that a notable percentage of participants reported that reference librarians do not consistently monitor the presence of patrons awaiting

assistance at unstaffed reference desks or seek aid from other staff members during periods of high demand. The data reveals that a relatively smaller percentage of users from MAU 5(6%), ATBU 4(5%), UNIMAID 2(2%), and FUK, 2(4%) respectively, did not furnish feedback pertaining to the subject matter under consideration. According to the data collected, a significant majority of respondents from MAU 70(88%), ATBU 76(92%), UNIMAID 80(93%), and FUK 48(91%) have confirmed that reference librarians do not consistently monitor the presence of patrons waiting for assistance at unattended reference desks or seek help from other staff members during periods of high demand, in accordance with the RUSA approachability guideline.

According to the data presented in table 4.9, a small percentage 3(4%) of respondents from MAU reported that reference librarians promptly address remote inquiries in accordance with the approachability guideline established by the Reference and User Services Association (RUSA) for reference service delivery. This finding is similar to the responses from ATBU 3(4%), UNIMAID 3(3%), and FUK 6(11%). The data obtained from the proportions of participants across the four universities indicates a strong adherence of reference librarians to the RUSA approachability guideline. A small percentage of participants from MAU 6(8%), ATBU 5(6%), UNIMAID 1(1%), and FUK 3(6%) did not provide a response to the item being discussed. The findings indicate that a significant proportion of respondents from MAU 71(89%), ATBU 78(94%), UNIMAID 83(97%), and FUK 44(83%) expressed dissatisfaction with the responsiveness of reference librarians in their respective institutions when it comes to addressing remote inquiries, as per the guidelines outlined by RUSA for approachability in reference service delivery.

The data collected from participants at the four universities under investigation indicates a consistent pattern of responses, revealing a significant lack of adherence to the RUSA approachability guideline.

A statistical analysis was performed to examine the relationship between participants' responses on librarians' behavioral performance in compliance with the RUSA approachability guideline across various universities. The obtained result for $\chi^2(12)$ is 1.8714, which indicates a p-value of .0003. This p-value suggests that the observed data is statistically significant at a significance level of .05. The results indicate poor behavioral performance of reference librarians which significantly means a lack of adherence to the RUSA approachability guideline among reference librarians that were included in the study.

4.5.6 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Interest

According to Maness et al. (2009), it is acknowledged by the RUSA Guidelines that the conduct of reference staff members, as perceived by patrons, plays a crucial role in determining the level of success or failure in reference interactions. To optimize the quality of service provided to patrons, librarians engaged in reference services should strive to maintain a comprehensive understanding of and adhere to the RUSA Guidelines to the greatest extent feasible. A competent librarian should exhibit a profound level of interest in the reference transaction. The level of interest in this study was ascertained through the utilization of quantitative measures. To establish this, the study employed items of questionnaires to postgraduate students, which all 302 responded to the item of the questionnaires on the interest component of RUSA guideline.

Frequency counts and percentages were used to answer the research questions while, chi-square at $p < 0.05$ was applied to establish statistical significant association of the mode of interaction of reference librarians with patrons across the selected universities, The findings are presented in table 4.12.

Table 4.12: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Interest

Items	MAU n=80				ATBU n=83				UNIMAID n=86				FUK n=53											
	A		U		N		A		U		N		A		U		N							
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%						
1. Reference librarians provide their undivided attention to the patron and their information requirements.	3	4	20	25	57	71	2	2	1	1	80	96	4	5	2	2	80	93	2	4	3	6	48	91
2. Throughout the transaction, reference librarians keep eye contact with the patron.	3	4	5	6	72	90	2	2	1	1	80	96	5	6	2	2	79	92	4	8	2	4	47	89
3. Reference librarians affirm their comprehension of the patron's requirements by nodding their heads, giving short explanations, or asking further questions to comprehend the patron's inquiry better.	4	5	9	11	67	84	2	2	8	10	73	88	4	5	2	2	80	93	3	6	7	13	43	81
4. Reference librarians respond promptly to user inquiries.	5	6	3	4	72	90	5	6	4	5	74	89	2	2	3	3	81	94	4	8	9	17	40	75
5. Reference librarians keep frequent online or voice contact with patrons to express interest and reassure them that their inquiry is still valid and that a response is on the way.	6	8	3	4	71	89	3	4	5	6	75	90	2	2	1	1	83	97	7	$\frac{1}{3}$	13	25	33	62

A=Adherence, U=Uncertain, N=non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 7.3848, $p = .0001$. The result is significant at $p < .05$

Source: Study Data 2022

The data presented in Table 4.12 suggests that a low proportion of postgraduate students across MAU, ATBU, UNIMAID, and FUK universities feel that reference librarians consistently provide undivided attention to patrons and their information needs, aligning with the interest standards established by RUSA. The survey results indicate that a small percentage of participants from MAU 3(4%), ATBU 2(2%), UNIMAID 4(5%), and FUK 2(4%) reported that reference librarians consistently provide their undivided attention to patrons and their information needs. A notable proportion of participants expressed uncertainty regarding the behavioral performance of reference librarians, as outlined in the RUSA Guidelines for interest. The data indicates that among the surveyed students, 20(25%) from MAU, 1(1%) from ATBU, 2(2%) from UNIMAID, and 3(6%) from FUK expressed uncertainty regarding the matter in question. Approximately 57(71%) of respondents from MAU reported that reference librarians were not providing their undivided attention to the patron and their information requirements in line with the Reference and User Services Association (RUSA) guideline pertaining to interest. A significant proportion of respondents from ATBU, UNIMAID, and FUK, specifically 80(96%), 80(93%), and 48(91%) respectively, shared a similar sentiment.

According to the data in table 4.12, a minority of participants 3(4%) reported that reference librarians at MAU consistently maintain eye contact with patrons during reference service transactions, in line with the guidelines established by the Reference and User Services Association (RUSA). The data indicates that a small percentage of participants from ATBU, UNIMIAD, and FUK (2(2%), 5(6%), and 4(8%) respectively) reported that reference librarians at their institutions consistently

maintain eye contact with patrons during transactions, which is in line with the RUSA interest criterion. A small percentage of participants (5(6%) from MAU, 1(1%) from ATBU, 2(2%) from UNIMAID, and 2(4%) from FUK) expressed uncertainty regarding the frequency of eye contact between reference librarians and patrons during reference service transactions, as outlined by the Reference and User Services Association (RUSA) in relation to their interest. A significant majority of participants from the MAU 72(90%) indicated that reference librarians lack consistency in maintaining eye contact with patrons during interactions. The findings indicate that a significant percentage of respondents from ATBU 80(96%), UNIMAID 79(92%), and FUK 47(89%) reported that reference librarians at their respective institutions do not consistently maintain eye contact with patrons during reference service interactions. This observation is inconsistent with the guidelines set by the Reference and User Services Association (RUSA) regarding engagement and attentiveness. The consistent response from the universities indicates a significant absence of dedication to the RUSA interest criterion among these institutions.

According to the data presented in table 4.12 of the survey, it was found that a minority of participants 4(5%) from MAU reported that reference librarians in their institution employ various methods, such as nodding, providing brief explanations, or asking additional questions, to ensure their understanding of the patron's needs aligns with the RUSA interest guideline. The findings are consistent with the respective percentages of 2(2%) from ATBU, 4(5%) from UNIMAID, and 3(6%) from FUK. A small percentage of respondents (9(11%) from MAU, 8(10%) from ATBU, 2(2%) from UNIMAID, and 6(7%) from FUK) did not provide feedback on the extent to which reference librarians adhere to the Reference and User Services Association

(RUSA) guideline on confirming their understanding of patrons' needs. The majority of participants from MAU 67(84%) reported that reference librarians in their institution did not adhere to the RUSA interest guideline by confirming their understanding of the patron's needs through non-verbal cues, brief explanations, or follow-up questions during reference service provision. The results obtained from the study showed a high level of consistency among participants from different universities. Specifically, 73(88%) of participants from ATBU, 80(93%) of participants from UNIMAID, and 43(81%) of participants from FUK yielded similar findings. The findings suggest that there is a prevalent non-compliance with the RUSA interest guideline regarding reference librarians' Behavioral Performance.

According to the data presented in table 4.12, the study found that only 5(6%) of respondents from MAU reported that reference librarians in their institution were prompt in responding to user inquiries. The obtained result showed a similarity to the responses of participants from ATBU 5(6%), UNIMAID 2(2%), and FUK 4(8%). A smaller percentage of participants, ranging from 2% to 8% across different universities (MAU 3(4%), ATBU 4(5%), UNIMAID 3(3%), and FUK 9(17%)), indicated uncertainty regarding the response of reference librarians to user enquiries. The data reveals that a significant proportion of respondents expressed dissatisfaction with the perceived lack of prompt response from reference librarians in their respective institutions. Specifically, 72(90%) of respondents from MAU, 74(89%) from ATBU, 81(94%) from UNIMAID, and 40(75%) from FUK reported this dissatisfaction. The study reveals a lack of adherence to the RUSA guideline on interest among reference librarians in the examined universities. Specifically, the

librarians do not respond promptly to user enquiries, indicating a widespread issue in this regard.

The data from table 4.12zz shows that only 6(8%) of participants reported that reference librarians at MAU maintain regular online or phone communication with users. This suggests that a small proportion of librarians demonstrate their interest in users' inquiries and provide reassurance about the validity of their responses. The obtained result aligns with the results from ATBU 3(4%), UNIMAID 2(2%), and FUK 7(13%), indicating a consistent trend across the institutions. A small percentage of participants, specifically 3(4%) from MAU, 5(6%) from ATBU, 1(1%) from UNIMAID, and 13(25%) from FUK, chose not to respond to the inquiry requirements on interest, indicating a level of uncertainty. However, the results show that majority of the participants from MAU 71(89%), ATBU 75(90%), UNIMAID 83(97%), and FUK 33(62%) reported that reference librarians in their institutions do not regularly maintain online or voice contact with patrons to demonstrate interest and provide reassurance regarding the validity of their inquiries and the progress of their responses. This finding is not in line with the RUSA standards for reference service delivery. The data collected from multiple institutions reveals a consistent pattern, wherein the majority group has a higher representation among the respondents.

A statistical analysis was done to investigate the relationship between participants' self-reported evaluation on reference librarians behavioral performance in compliance with the RUSA guideline on interest. The data obtained, with $\chi^2(12) = 7.3848$ and $p = .0001$, demonstrate statistical significance at a significance level of .05. The data analysis revealed a significant correlation between the responses of participants from

the four universities, indicating a lack of adherence to the RUSA guideline regarding interest in the libraries of their respective universities.

4.5.7 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Listening/Inquiring.

According to Crowley and Gilreath (2002) user perceptions of service quality is determined on how patrons saw reference librarians and employees as usually kind and patient, but not always helpful in listening and inquiring as well as being extremely suspicious of students. List of questions were presented to postgraduate students to indicate their level of agreement to areas librarians are helpful to them. The questions were distributed to 302 respondents and all of them responded to the items. Data generated was analyzed using frequency counts and percentages to answer the research questions while, chi-square at $p < 0.05$ was applied to establish statistically significant association of the level of compliance to RUSA guideline for listening and inquiring. The findings are shown in a table 4.13.

Table 4.13: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Listening and Inquiring

Items	MAU n=80						ATBU n=83						UNIMAID n=86						FUK n=53					
	A		U		N		A		U		N		A		U		N		A		U		N	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1. To the patrons, reference librarians are attentive, courteous, and helpful.	3	4	2	3	75	94	3	4	3	4	77	93	4	5	2	2	80	93	3	6	3	6	47	89
2. When necessary, reference librarians define the aims or objectives of the patron's research.	4	5	3	4	73	91	4	5	5	6	75	90	3	3	4	5	79	92	3	6	13	25	37	70
3. Reference librarians refine search queries using clarifying questions.	3	4	3	4	74	93	5	6	3	4	75	90	3	3	6	7	77	90	2	4	1	2	50	94
4. Reference librarians maintain impartiality throughout the transaction and make no value judgments regarding the topic matter or nature of the inquiry.	5	6	2	3	73	91	3	4	3	4	77	93	6	7	4	5	76	88	5	9	4	8	44	83
5. Reference librarians are sensitive to patrons' privacy and preserve confidentially after the transaction.	6	8	4	5	70	88	2	2	4	5	77	93	4	5	3	3	79	92	6	11	5	9	42	79

A=Adherence, U=Uncertain, N=Non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 0.05176, p = .0000. The result is significant at $p < .05$

Source: Study Data 2022

The research findings from Table 4.13 indicate that a small percentage of postgraduate students from four universities (MAU, ATBU, UNIMAID, and FUK) reported that reference librarians in their respective institutions demonstrate the practice of being attentive, courteous, and helpful to patrons in line with the RUSA guidelines for listening and inquiring. Specifically, only 3(4%) of participants from MAU and ATBU, 4(5%) from UNIMAID, and 3(6%) from FUK mentioned that reference librarians were attentive, courteous, and helpful to patrons. A significant number of participants showed uncertainty about the reference librarians' Behavioral Performance, as stated in the RUSA Guidelines for listening and inquiry. Specifically, 2(3%) of students from MAU, 3(4%) from ATBU, 2(2%) from UNIMAID, and 3(6%) from FUK expressed uncertainty in this regard. 75(94%) of respondents from MAU believe that reference librarians are not meeting the standards of attentiveness, courtesy, and helpfulness outlined by the RUSA listening and inquiring guidelines. The findings show that respondents from ATBU 77(93%), UNIMAID 80(93%), and FUK 47(89%) have similar perceptions. They reported that these reference librarians are often not attentive, courteous, and helpful to patrons during reference service delivery. The data from the four universities shows that there is a low level of adherence to RUSA standards, as indicated by the consistent responses of the respondents.

The findings on item 2 as presented in table 4.13 reveals study that, small percentage of the respondents 4(5%) affirmed that reference librarians in MAU define the aims or objectives of the patron's research as indicated by RUSA guidelines on listening and inquiring. The result obtained was similar to those of ATBU 4(5%), UNIMAID

3(3%), and FUK 3(6%). The data suggests that librarians in these universities follow the RUSA standards mentioned earlier. A significant number of participants showed uncertainty about whether reference librarians define the aims or objectives of a patron's research, as stated in the RUSA Guidelines on listening and inquiring. 3(4%) of MAU, 5(6%) of ATBU, 4(5%) of UNIMAID, and 13(25%) of FUK respondents showed uncertainty in this regard. The data shows that a high percentage of respondents from MAU 73(91%), ATBU 75(90%), UNIMAID 79(92%), and FUK 37(70%) believe that reference librarians do not adequately define the aim or objectives of the patron's research when it is needed.

Only 3(4%) of respondents from MAU agree with the construct that reference librarians use clarifying questions to improve search queries. The data indicates that a similar proportion of respondents, namely 5(6%) from ATBU, 3(3%) from UNIMAID, and 2(4%) from FUK, agreed that reference librarians in their universities use clarifying questions to improve search queries during reference services. The universities under investigation showed a low level of compliance. 3(4%) of respondents from MAU, 3(4%) from ATBU, 6(7%) from UNIMAID, and 1(2%) from FUK chose not to respond to the inquiry, indicating a level of uncertainty. However, the data shows that a large majority of participants from MAU 74(93%), ATBU 75(90%), UNIMAID 77(90), and FUK 50(94%), reported that reference librarians do not ask clarifying questions to refine search queries during reference service provision. The study found that reference librarians in all the universities examined do not follow the RUSA guideline on listening and inquiring, indicating a widespread lack of adherence to this guideline.

In table 4.11, the findings revealed that only 5(6%) of participants agreed that reference librarians at MAU remained impartial and made value judgements based on RUSA standards. The result aligns with the percentages from ATBU 3(4%), UNIMAID 6(7%), and FUK 5(9%). A small percentage of participants 2(3%) from MAU, 3(4%) from ATBU, 4(5%) from UNIMAID, and 4(8%) from FUK were unsure if reference librarians in their institutions remained impartial and made value judgements in accordance with RUSA standards and these respondents opted not to answer. The data, however, shows that a high percentage of respondents from MAU 73(91%), ATBU 77(93%), UNIMAID 76(88%), and FUK 44(83%) believe that reference librarians in their institutions do not remain impartial during transactions and do not make made value judgements in line with the standards of listening and inquiring set by RUSA. The majority of respondents from various universities strongly agreed that reference librarians in their respective universities were not impartial and did not make any value judgements regarding the subject matter or nature of the inquiry. The adherence level is low.

6(8%) of participants from Modibo Adama University (MAU) Yola recognized that reference librarians at MAU are attentive to patrons' privacy and maintain confidentiality during transactions. The obtained result demonstrates a consistent trend with the respective results of ATBU 2(2%), UNIMAID 4(5%), and FUK 6(11%), where respondents consistently agreed that reference librarians are sensitive to patrons' privacy and maintained confidentiality after transactions. A small percentage of participants from MAU (5%), ATBU (5%), UNIMAID (3%), and FUK (9%) expressed uncertainty about whether reference librarians adhere to the RUSA guideline of listening and inquiring, specifically in regard to being sensitive to

patrons' privacy and preserving confidentiality after the transaction. As a result, some respondents opted not to answer this question. The data shows that a large majority of participants from MAU 70(88%), ATBU 77(93%), UNIMAID 79(92%), and FUK 42(79%) believe that reference librarians are not sensitive to patrons' privacy and lack confidentiality after the transaction. The reference librarians at these universities do not prioritize patrons' privacy and confidentiality after transactions, as outlined in the guidelines set by the Reference and User Services Association (RUSA) on listening and inquiring. Participants from multiple universities consistently showed a low level of adherence to the RUSA guideline on listening and inquiring, as indicated by their responses on all items and constructs of measurement. The current study is in line with the findings presented by Curry, (2016) in the research titled "The Reference Interview in the Google Age." It revealed a significant deficiency in adhering to RUSA guidelines pertaining to reference behaviors, specifically in the areas of listening, inquiring, and searching.

A statistical test was conducted to determine the significance of the responses from participants regarding their behavioral performance in compliance with the RUSA listening and inquiring guideline. The result $\chi^2 (12) = 0.05176$, $p = .0000$ is statistically significant at the 0.05 level. The data showed a strong correlation between the responses of the participants from different universities hence, reference librarians across the universities do not meet the required level of conformity to RUSA listening and inquiring guidelines.

4.5.8 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Searching

According to Nilsen (2004), bypassing reference services such as interview, aimless referrals of patrons to an information source without searching for the usefulness and relevance of it often led to library users dissatisfaction. Data was gathered using close-ended questionnaires from postgraduate students being the highest category of students who continuously seek information in the libraries, the data collected was analyzed through the application of frequency counts and percentages for all the research questions while, chi-square at $p < 0.05$ was employed to establish statistical significant relationship on the level of reference librarians compliance to RUSA guideline on searching across the selected universities and the results are presented in table 4.14.

Table 4.14: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Searching

Items	MAU n=80						ATBU n=83						UNIMAID n=86						FUK n=53					
	A		U		N		A		U		N		A		U		N		A		U		N	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1. The reference librarian ascertains what the patron has previously attempted and encourages the patron to add suggestions.	5	6	5	6	70	88	2	2	11	13	70	84	2	2	4	5	80	93	6	11	21	40	26	49
2. Reference librarians explain the search method to the patron.	3	4	3	4	74	93	3	4	2	2	78	94	5	6	3	3	78	91	5	9	15	28	33	62
3. When there is little or excessive information, reference librarians work with the patron to narrow or widen the topic.	2	3	11	14	67	84	5	6	13	16	65	78	4	5	2	2	80	93	3	6	11	21	39	74
4. When applicable, reference librarians provide pointers, specific search pathways, and the names of resources utilized to get the answer so that the client may learn to answer comparable queries on his or her own.	6	8	3	4	71	89	2	2	1	1	80	96	3	3	4	5	76	88	2	4	1	2	50	94
5. When feasible, reference librarians employ suitable technology to assist patrons navigating information resources.	5	6	14	18	61	76	1	1	2	2	82	99	5	6	2	2	78	91	5	9	3	6	45	85

A=Adherence, U=Uncertain, N=Non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 0.0216, $p = .0001$. The result is significant at $p < .05$

Source: Study Data 2022

Based on the data presented in Table 4.14, which examines the Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in accordance with RUSA Guidelines for Searching, it is evident that a small proportion of participants from the four universities under study, namely MAU 5(6%), ATBU 2(2%), UNIMAID 2(2%), and FUK 6(11%), reported that reference librarians demonstrate the practice of assessing the patron's prior attempts and actively encouraging the patron to contribute additional information. The findings indicate that a notable proportion of participants exhibited uncertainty regarding the reference librarians' Behavioral Performance, as outlined in the RUSA Guidelines for Searching. Specifically, 5(6%) of participants from MAU, 11(13%) from ATBU, 4(5%) from UNIMAID, and 21(40%) from FUK expressed uncertainty in terms of accurately determining the patron's prior attempts and effectively encouraging the patron to provide suggestions.

According to the data collected from the respondents in the MAU study, a significant majority 70(88%) expressed the view that reference librarians generally do not engage in the practice of determining the patron's prior attempts or actively encouraging them to contribute suggestions. The obtained result aligns with the findings from ATBU, which reported a percentage of 70(84%). Similarly, UNIMAID reported a percentage of 80(93%), indicating a higher level of agreement with the obtained result. On the other hand, FUK reported a lower percentage of 26(49%), suggesting a notable discrepancy between their findings and the obtained result. The consistent findings observed across the four universities suggest that there may have been a lack of effective communication between the reference librarian and the patron. It appears

that the librarian did not adequately inquire about the patron's prior attempts and instead prompted the patron to provide additional suggestions.

Based on the data analysis of item 2, as depicted in Table 4.14, it has been concluded that a small proportion of respondents from MAU 3(4%) reported that reference librarians frequently adhere to RUSA guidelines for conducting searches during reference service provision by elucidating the search methodology to the patron. In order to ascertain the magnitude of dissemination among various universities, evaluations from postgraduate students at other institutions were conducted, yielding comparable results indicating similarly low proportions. The data reveals that ATBU had a positive confirmation rate of 3(4%), while UNIMAID had rates of 5(6%) and 15(28%) from FUK. These findings are consistent with the responses obtained from MAU, which indicate that reference librarians at these institutions explain the search method to patrons. A small percentage of respondents 3(4%) from MAU, 2(2%) from ATBU, 3(3%) from UNIMAID, and 15(28%) from FUK expressed uncertainty regarding whether reference librarians explain the search method to patrons. Consequently, these respondents chose not to provide a response. The results indicate that a significant proportion of respondents from MAU 74(93%), ATBU 78(94%), UNIMAID 78(91%), and FUK 33(62%) reported that reference librarians do not provide an explanation of the search method to patrons. The findings demonstrate a high level of consistency across the four universities, providing confirmation that reference librarians generally do not provide explanations of the search method to patrons during the delivery of their services. The findings indicate a notable lack of adherence to the RUSA search guideline.

In a similar context, it is pertinent to emphasize that 2(3%) of the participants from the Modibo Adama University (MAU) Yola acknowledged that reference librarians engage in collaborative efforts with patrons to refine or broaden the scope of a topic in instances where there is an insufficient or excessive amount of information available. The data suggests that a comparable percentage of respondents, specifically 5(6%) from ATBU, 4(5%) from UNIMAID, and 3(6%) from FUK, expressed agreement with the notion that reference librarians in their respective universities collaborate with patrons to refine or broaden the topic when faced with a scarcity or surplus of information.

Based on the obtained percentage, the findings indicate a relatively low level of adherence to the RUSA search guidelines in relation to the practice of collaborating with patrons to refine or broaden their topic during the provision of reference services. The research findings indicate that a portion of the respondents exhibited uncertainty across different institutions. Specifically, 11(14%) of respondents from MAU, 13(16%) from ATBU, 2(2%) from UNIMAID, and 11(21%) from FUK expressed uncertainty. The results indicate that a significant proportion of participants from MAU 67(84%), UNIMAID 65(78%), UNIMAID 80(93%), and FUK 39(74%) express a considerable level of dissatisfaction with the behavioral performance of reference librarians. Specifically, this dissatisfaction pertains to the librarians' ability to effectively collaborate with patrons in order to refine or broaden the topic of inquiry when faced with either a scarcity or an excess of information during the provision of reference services. The data collected from participants at the four universities indicates that a significant majority did not express agreement with the

measurement construct. This finding suggests a notable lack of adherence among librarians to the RUSA behavioral performance guideline on searching.

The results pertaining to item 4 in table 4.14 revealed that a small percentage of participants 6(8%) expressed agreement with the notion that reference librarians at MAU adhere to RUSA guidelines for conducting searches. This involves providing guidance, specific search strategies, and disclosing the resources utilized to arrive at an answer, with the intention of enabling clients to independently address similar inquiries, when appropriate. The obtained result demonstrates a consistent trend with the respective results of 2(2%) from ATBU, 3(3%) from UNIMAID, and 2(4%) from FUK. A small percentage of participants (3(4%) from MAU, 1(1%) from ATBU, 4(5%) from UNIMAID, and 1(2%) from FUK) expressed uncertainty regarding the level of adherence to the RUSA guidelines for searching by reference librarians in their respective universities.

Based on the study results, it is evident that a notable percentage of participants across various institutions have expressed dissatisfaction with the reference librarians' performance in providing guidance. Specifically, participants have reported that reference librarians frequently neglect to offer helpful suggestions, specific search strategies, and the identification of resources utilized to arrive at the solution. This lack of support hinders the patrons' ability to independently address similar inquiries in the future, when appropriate. The data reveals a consistent trend across multiple universities. Notably, 71(89%) of participants from MAU, 80(96%) of participants from ATBU, 76(88%) of participants from UNIMAID, and 50(94%) of participants from FUK exhibited this trend. Based on the results of the study, it can be deduced

that a majority of postgraduate students hold a pessimistic viewpoint towards reference librarians. The perception of reference librarians being inadequate is primarily due to their perceived lack of providing sufficient guidance, specific search strategies, and recommended resources to help patrons find answers. This approach aims to empower patrons to independently address similar queries in the future, when appropriate.

Based on the finding of item 5, the study reveals that 5(6%) of the participants in the study on MAU have reported that reference librarians utilize appropriate technology to aid patrons in accessing information resources whenever possible. The obtained findings from ATBU, UNIMAID, and FUK indicate a consistency in the observed percentages. Specifically, the findings indicate a 1(1%) consistency with ATBU, 5(6%) with UNIMAID, and 5(9%) with FUK. The data collected from the four universities indicates a high level of satisfaction among postgraduate students regarding the reference services provided by the reference librarians. Specifically, the students expressed satisfaction with the use of appropriate technology to assist them in navigating information resources, in accordance with the RUSA behavioral guidelines.

A portion of the respondents, specifically 14(18%) from MAU, 2(2%) from ATBU, 2(2%) from UNIMAID, and 3(6%) from FUK, exhibited a level of uncertainty and opted not to provide a response to the presented inquiry. The findings indicate that a significant majority of participants from MAU 61(76%), ATBU 82(99%), UNIMAID 78(91%), and FUK 45(85%) reported that reference librarians do not effectively utilize appropriate technology to aid patrons in navigating information resources,

when it is feasible to do so. Consequently, it can be inferred that reference librarians across these universities are not adhering to the guidelines set forth by the Reference and User Services Association (RUSA) for conducting searches. This suggests a notable lack of compliance with RUSA's search guidelines among reference librarians in these institutions.

A statistical test was conducted to assess the significance of the relationship between the responses obtained from postgraduate students regarding the behavioral performance of reference librarians in line with RUSA search guidelines. The obtained results for $\chi^2 (12) = 0.0216$, $p = .0001$ indicate a statistically significant finding at a significance level of .05. The findings of the indicate a consistent pattern among participants from all the universities examined. This means that the postgraduate students reported inappropriate behavioral performance of reference librarians across the selected universities with no exception. The study summarized the finding based on the student's evaluation as follows: There is a lack of sufficient adherence to the RUSA search guideline by reference librarians within the selected universities as findings revealed similarities in the way reference services are provided, specifically in adherence to the RUSA search guideline.

4.5.9 Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Follow-Up

Follow-up according to Nilsen (2004) entails finding usefulness and relevant information sources to patrons without failure to seek follow-up queries to determine whether the patron obtained the correct information needed are attributes that led to library users satisfaction. To identify the extent to which librarians provide follow-up services, a list of items was presented to postgraduate students to indicate the extent to

which librarians' follow-up patrons to ensure they have the right information. Data gathered was analyzed using frequency counts and percentages for all the research questions while, chi-square at $p < 0.05$ was applied to test for statistical significant association of the reference librarians' level of adherence to RUSA guidelines for follow-up across the selected universities, the results are presented in table 4.15.

Table 4.15: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in line with RUSA Guidelines for Follow-Up

Items	MAU n=80				ATBU n=83				UNIMAID n=86				FUK n=53											
	A		U		N		A		U		N		A		U		N							
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%						
1. Reference librarians inquire whether the patron's inquiries have been fully addressed.	2	3	3	4	75	94	2	2	3	4	80	96	4	8	3	6	76	88	3	6	5	9	45	85
2. Reference librarians urge patrons to return if they have more inquiries.	3	4	3	4	74	93	4	5	3	4	76	92	1	2	3	6	82	95	1	2	13	25	39	74
3. When more topic expertise is required, reference librarians consult with other librarians or experts in the field.	2	3	11	14	67	84	2	2	2	2	79	95	2	4	0	0	84	98	1	2	3	6	49	92
4. Reference librarians inform patrons about various accessible reference paths (e-mail, chat excreta.)	5	6	2	3	73	91	2	2	3	4	78	94	3	6	3	6	80	93	3	6	3	6	47	89
5. If the patron's question has not been satisfactorily addressed, reference librarians direct the patron to other sources or institutions.	5	6	14	18	61	76	3	4	13	16	67	81	3	6	6	11	77	90	4	8	2	4	47	89

A=Adherence, U=Uncertain, N=non-adherence. Source: Study Data 2022

Chi-square (χ^2) = (12) = 0.2197, $p=.0003$. The result is significant at $p < .05$

Source: Study Data 2022

The analysis of data collected from postgraduate students regarding their perception of reference librarians' behavioral performance, as aligned with the RUSA guidelines for follow-up, is presented in Table 4.15. The findings reveal that a small proportion, specifically 2(3%) of the participants, acknowledged that reference librarians at MAU exhibit professional behavior while providing services. This professionalism is demonstrated by their proactive approach in ensuring that the patrons' inquiries have been thoroughly addressed. The data reveals a significant disparity between the participants from ATBU and UNIMAID in terms of reporting noticeable good behavior among librarians regarding the thoroughness of addressing patron inquiries. Only 2(2%) of ATBU participants reported such behavior, whereas 4(8%) of UNIMAID participants indicated the presence of this positive behavior. Based on the data collected from participants of the FUK study, it is observed that a minority of 3(6%) express satisfaction with the behavioral performance of reference librarians. Specifically, this satisfaction pertains to the librarians' ability to inquire about the extent to which patrons' inquiries have been adequately addressed, in accordance with the guidelines outlined by the Reference and User Services Association (RUSA) for follow-up.

Based on the assessment conducted among postgraduate students at various universities, it is evident that reference librarians exhibited a low level of adherence to the standards set by the Reference and User Services Association (RUSA). The findings of this discovery align with the results observed in other universities that have been examined. Based on the provided statistical data, a distinct cohort of postgraduate students hailing from diverse universities have expressed skepticism.

The data reveals that a small proportion of students from different universities expressed uncertainty regarding a certain matter. Specifically, 3(4%) of students from MAU, 3(4%) of students from ATBU, 3(6%) of students from UNIMAID, and 5(9%) of students from FUK were unsure. In a comparative analysis of universities, it was observed that FUK exhibited a higher proportion of students who were undecided in their academic pursuits, as opposed to the other institutions under consideration.

Based on the data analysis, it can be observed that a significant majority of approximately 75(94%) of the respondents expressed their perception that MAU reference librarians, as perceived by postgraduate students, exhibit a deficiency in their behavioral performance pertaining to the crucial aspect of inquiring whether the inquiries made by patrons have been adequately resolved. Based on the data collected from ATBU participants, it can be observed that a significant majority, approximately 80(96%), reported that librarians in their institution do not actively inquire about the resolution of patrons' inquiries. Based on the acquired data, it is evident that a significant proportion of participants from UNIMAID 76(88%) and FUK 45(85%) reported not receiving any follow-up questions from reference librarians regarding the initial inquiry's resolution.

Based on the analysis of item 2, it can be observed that a minority of MAU participants, specifically 3(4%), reported that they were encouraged by reference librarians to revisit the library if they had additional inquiries. The evaluations of postgraduate programs at other universities were found to be comparable, with a smaller proportion indicating similar results. The data analysis reveals that ATBU exhibited a positive confirmation rate of 4(5%) in delivering reference services,

specifically in relation to the RUSA behavioral guideline of urging users to return for further inquiries. On the other hand, UNIMAID displayed a notably lower proportion of 1(2%) in confirming positive behavioral performance in the same context. This finding aligns with FUK's corresponding rate of 1(2%). The non-response rate varied across the different universities in our study. Among the respondents from MAU, 3(4%) did not provide a response. Similarly, 3(4%) of the respondents from ATBU did not reply. In comparison, the non-response rate was slightly higher among the respondents from UNIMAID, with 3(6%) not providing a response. The highest non-response rate was observed among the respondents from FUK, where 13(25%) did not reply. Based on the analysis, it can be concluded that the reference librarians from the selected universities demonstrate a notably low level of adherence. Specifically, a significant majority of 74(93%) of the participants in the MAU displayed unsatisfactory behavioral performance in the context of service delivery by reference librarians. The observed outcome exhibits a resemblance to the findings of 76(92%) of participants from ATBU, indicating a moderate alignment with the results obtained from 82(95%) of participants from UNIMAID and 39(74%) of participants from FUK.

Based on the analysis of data gathered from four universities, it is evident that postgraduate students expressed dissatisfaction with the reference services offered by reference librarians at their respective institutions. The findings of the study also confirm a notable deviation from the recommended RUSA behavioral guideline, which emphasizes the importance of encouraging users to return if they have further inquiries during the reference service process. This discrepancy was reported by a substantial number of respondents from the surveyed universities.

Based on the findings of item 3, it was observed that a small proportion 2(3%) of participants in the Modibo Adama University (MAU) reported instances where reference librarians sought consultation from other librarians or subject matter experts. This consultation was sought when additional expertise on specific topics was deemed necessary. The data presented aligns with the reported percentages of 2(2%) from participants at ATBU, 2(4%) from participants at UNIMAID, and 1(2%) from participants at FUK. The research findings indicate that a notable proportion of students from MAU, ATBU, and FUK expressed uncertainty. Specifically, 11(14%) of students from MAU, 2(2%) of students from ATBU, and 3(6%) of students from FUK were observed to have this sentiment. The postgraduate students have expressed a significant level of dissatisfaction with the behavioral performance of reference librarians. Specifically, they have noted that there is room for improvement in terms of consulting with other librarians or subject matter experts when a higher level of topic expertise is needed.

According to the data obtained from the study, a significant majority of participants 67(84%) expressed their observation that reference librarians at their respective institutions do not adhere to the practice of consulting with other librarians or subject matter experts, despite it being a necessary requirement. The analysis reveals a significant level of agreement among participants from various universities, suggesting a strong consistency in their judgements. The analysis revealed that a significant majority of individuals from ATBU 79(95%), participants from UNIMAID 84(98%), and participants from FUK 49(92%) exhibited congruent perspectives. Based on the data analysis, it can be observed that postgraduate students expressed a negative perception towards reference librarians in terms of their proficiency in

seeking consultation from other librarians or subject matter experts, as and when needed. The data suggests that reference librarians may not consistently adhere to the RUSA behavioral guideline regarding consulting with other librarians or experts in the field, as required by the RUSA guidelines for follow-up.

It is noteworthy to highlight the results pertaining to item 4, which revealed that 5(6%) of participants from the MAU reported that reference librarians provide information to patrons regarding different accessible reference channels, such as email and chat services. The observed finding at MAU aligns with the responses gathered from other institutions, specifically 2(2%) from ATBU, 3(6%) from UNIMAID, and 3(6%) from FUK. This convergence of data provides further substantiation for the response patterns observed at MAU. A significant segment of the surveyed population demonstrated a level of ambiguity and opted to withhold their viewpoints. The data reveals that a small proportion of respondents from different universities fell into the specified category. Specifically, 2(3%) of respondents were from MAU, 3(4%) from ATBU, 3(6%) from UNIMAID, and 3(6%) from FUK.

Based on the survey results, it is evident that a notable percentage of participants across all institutions have reported a consistent failure on the part of reference librarians to adequately communicate information regarding available reference resources to library patrons. The observed trend indicates a high prevalence among participants from different institutions. Specifically, 73(91%) of participants from MAU, 78(94%) of participants from ATBU, 80(93%) of participants from UNIMAID, and 47(89%) of participants from FUK exhibited this trend. Based on the findings of the study, it can be inferred that postgraduate students tend to have a

negative perception of reference librarians. This perception is primarily driven by their belief that reference librarians are not adequately competent in providing information about the different reference resources available to library patrons. The findings of this study offer empirical support for the claim that reference librarians exhibit a significant lack of adherence to the overarching guideline regarding behavioral performance, as outlined in the RUSA guidelines for follow-up.

The analysis of the data from item 5 reveals that approximately 5(6%) of the participants in the MAU expressed agreement with the statement regarding the satisfaction of reference librarians in directing patrons to other sources or institutions, in accordance with the guidelines set by the Reference and User Services Association (RUSA) for follow-up. The confirmation provided is consistent with the findings of the acquisition of 3(4%) from ATBU, 3(6%) from UNIMAID, and 4(8%) from FUK. These percentages suggest a notable level of satisfaction among postgraduate students from these universities in relation to the reference services provided by the reference librarians. The data reveals that a notable proportion of participants, specifically 14(18%) from MAU, 13(16%) from ATBU, 6(11%) from UNIMAID, and 2(4%) from FUK, demonstrated a sense of uncertainty and opted not to provide a response to the question at hand. Based on the findings outlined in table 4.13, it is evident that a considerable proportion of participants have reported their perception that reference librarians are not proficient in utilizing search tools while providing assistance to patrons. The analysis reveals a persistent pattern observed across the four universities that were examined.

The data reveals that MAU, ATBU, UNIMAID, and FUK exhibited higher rates of deviation from the expected performance of reference librarians in effectively guiding patrons to alternative sources or institutions, as outlined by the guidelines set by the Reference and User Services Association (RUSA). Specifically, MAU reported a deviation rate of 61(76%), ATBU reported 67(81%), UNIMAID reported 77(90%), and FUK reported 47(89%). These figures indicate a significant departure from the expected level of satisfactory guidance provided by reference librarians in these institutions. The findings indicate that there is a lack of adherence to RUSA guidelines by reference librarians in their approach to addressing patron queries.

A statistical analysis was performed to assess the responses of participants across the universities on the behavioral performance of reference librarians. The analysis of the data revealed that the value of χ^2 (12) was 0.2197, with a p-value of .0000. These findings are significant at .05 level of significance. The consistency of the results shows that the implementation of follow-up practices within the Reference and User Services Association (RUSA) by reference librarians is not in compliance with the designated standards.

The incorporation of the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA) competencies is crucial in ensuring the delivery of high-quality reference services and user support. Therefore, the researchers identify the fundamental strategies that contribute to optimal performance in organizations that offer reference and user services to their clientele. In addition, the competencies outlined in the reference and user services librarians' professional framework encompass a core set of skills that are

essential across all professions. These include effective communication, proficiency in information technology and digital literacy, as well as strong reading, writing, and mathematical abilities (“Professional competencies for reference and user services librarians: RUSA Task Force on Professional Competencies,” 2003).

Based on the findings of the study, it is evident that a significant proportion of reference librarians in Northeast Nigeria demonstrate a relatively lower level of adherence to the established standards set by IFLA (International Federation of Library Associations and Institutions) and RUSA (Reference and User Services Association). These standards are specifically designed to ensure the provision of high-quality reference and information services to library patrons. The data collected from participants at four universities clearly indicates a prevalent trend of non-compliance, as a significant majority of participants reported not adhering to the guidelines. Conversely, only a small minority of participants reported following the guidelines. The present study aligns with the conclusions drawn by Platt and Benson, (2010), which assert that adherence to the IFLA and RUSA Guideline among reference librarians is not universal. Additionally, it highlights that a significant majority of libraries provide reference services (specifically chat-based) in accordance with their own individual policies on library reference services, guided by intuition. The study's results align with those of Shachaf and Horowitz, (2008), who conducted a similar investigation by analyzing 324 transactions from 54 libraries. Their findings also indicated a low level of compliance with IFLA and RUSA guidelines and demonstrated that adherence to these guidelines varied depending on the type of request.

- i. Determine the perception of postgraduate students regarding the behavioural performance of reference librarians and its impact on user satisfaction with the quality of reference services in selected federal university libraries.
- ii. Determine the challenges experienced by librarians in providing reference services in conformity to reference standards?

4.6 Information Needs of Post Graduate Students

The third objective of the study is to establish how reference librarians' behavioral performance meet the information needs of post graduate students in the selected federal university libraries. As per the findings of Soni et al. (2020), it has been established that postgraduate students have a significant requirement for information pertaining to research activities, academic growth, and scholarship, as well as staying updated with professional knowledge and acquiring information related to seminar and article writing. In order to ascertain the specific types of information that are required by graduate students, a comprehensive data collection process was undertaken. 302 post-graduate students were included in the study, and their responses were meticulously analyzed using frequency counts and percentages. This analytical approach was employed to address the research question in alignment with the stated objective. Additionally, the chi-square test was used with a significance level set at $p < 0.05$. The findings are displayed in Table 4.16.

Table 4.16: Information Needs of Post Graduate Students

Items	MAU n=80				ATBU n=83				UNIMAID n=86				FUK n=53			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Need for current awareness on academic development and scholarship	77	96.3	3	3.8	80	96.4	3	3.6	78	90.7	8	9.3	48	90.6	5	9.4
Need for information on research activities	74	92.5	6	7.5	78	94.0	5	6.0	80	93.0	6	7.0	50	94.3	3	5.7
Need for information to update professional knowledge	75	93.8	5	6.3	81	97.6	2	2.4	81	94.2	5	5.8	49	92.5	4	7.5
The need for information on seminar and article writing	76	95.0	4	5.0	79	95.2	4	4.8	79	91.9	7	8.1	47	88.7	6	11.3
Aggregate		94.4		5.6		95.8		4.2		92.4		7.6		91.5		8.5

Study Data, 2022. *Chi-square* (χ^2) = (9) = 1.070, $p=.0000$. The result is significant at $p < .05$

The findings indicate that a significant majority of postgraduate students 77 (96.3%) have identified the need for current awareness on academic development and scholarship as crucial information to be provided by the library at MAU. The obtained outcome aligns with the results reported by ATBU 80 (96.4%), UNIMAID 78 (90.7%), and FUK 48 (90.6%). It is widely acknowledged that students have a significant need for information on academic development and scholarship. However, it is worth noting that a small percentage of the respondents, specifically 3 (3.8%), expressed a lack of consideration for information related to academic development and scholarship. This finding is consistent with the responses of a few postgraduate students, specifically 3 (3.6%) from ATBU, 8 (9.3%) from UNIMAID, and 5 (9.4%) from FUK.

According to the findings in table 4.16, it was determined that a significant proportion of postgraduate students from MAU, specifically 74 (92.5%), expressed a recurring need for research-related information from reference librarians. The obtained outcome aligns consistently with the results achieved by ATBU 78 (94.0%), UNIMAID 80

(93.0%), and FUK 50 (94.3%). However, a limited number of postgraduate students from MAU 6 (7.5%), ATBU 5 (6.0%), UNIMAID 6 (7.0%), and FUK 3 (5.7%), have not recognised research activities as their primary information requirements during their interactions with reference librarians in their quest for information.

The analysis reveals that a significant majority of postgraduate students from MAU, specifically 75 (93.8%), have expressed their agreement with the statement that they frequently utilize the library as a means to access information and enhance their professional knowledge. The findings corresponded with those of ATBU 81 (97.6%), UNIMAID 81 (94.2%), and FUK 49 (92.5%), indicating that individuals actively engage in library visits to acquire information and enhance their professional knowledge. In contrast, a relatively small proportion of postgraduate students from MAU 5 (6.3%), ATBU 2 (2.4%), UNIMAID 5 (5.8%), and FUK 4 (7.5%) utilize the library for purposes beyond the acquisition of professional knowledge, opting instead to seek other forms of information.

According to the findings of the study, a significant majority of postgraduate students from MAU, specifically 76 (95.0%), expressed their agreement with the notion that their visits to the library primarily revolve around the purpose of acquiring information for seminar and article writing purposes. A significant majority of the students from ATBU, comprising 79 (95.2%) respondents, expressed their strong belief in the indispensability of acquiring knowledge on seminar and article writing. The findings demonstrate a high level of consistency with the results obtained from UNIMAID 79 (91.9%) and FUK 47 (88.7%), indicating a shared alignment in their respective information requirements. However, a small percentage of the students,

specifically 4 (5.0%), expressed their disagreement with the importance of visiting the library for information on seminar and article writing. This disagreement was also observed among 4 (4.8%) of students from ATBU, 7 (8.1%) from UNIMAID, and 6 (11.8%) from FUK. These students did not perceive the necessity of acquiring information related to seminar and article writing through library resources.

The collective percentage data from each university indicates a similar pattern in terms of the subject matter. Specifically, 83 (95.8%) of postgraduate students from ATBU recognised a greater need for information compared to the 80 (94.4%) of students from MAU who ranked second in this regard. The findings exhibit variations in proportion, with UNIMAID reporting a lower number of information needs, specifically 86 students, accounting for 92.4%, which is slightly higher than the 53 students (91.5%) from FUK.

The study established a statistically significant correlation between the information needs of postgraduate students at the university. The obtained results, specifically $\chi^2(9) = 1.070$, $p = .0000$, indicate a statistically significant relationship at a significance level of .05. A notable correlation exists among the information requirements of postgraduate students across the various universities. This implies that the information sought by postgraduate students from librarians in all the chosen universities is interconnected.

According to Huang's (2010) a significant number of graduate students held the belief that effectively addressing readers' needs played a crucial role in their academic success. According to Domini, Goh, Wong, and Chen (2010), the significance of

information needs cannot be overstated when it comes to achieving success and ensuring survival in the modern library and information landscape. The present study aligns with the aforementioned studies, affirming that the specific information preferences of students play a crucial role in determining the scope and mode of reference services provided by reference librarians to patrons.

The results of the study are consistent with the findings of Ogugua, Unegbu, Edem, and Haco-obasi (2019), which demonstrated a significant correlation between the information requirements of postgraduate students. The reference librarians proactively inform users about the availability of new information, facilitate users' search of digital resources, and effectively communicate the most up-to-date information in accordance with users' specific information requirements.

4.7 Perception of Postgraduate Students Regarding the Behavioral Performance of Reference Librarians on User's Satisfaction with Reference Services

The fourth objective of this study was to determine the perception of postgraduate students regarding the behavioral performance of reference librarians on user's satisfaction with reference services. Upon careful examination of the students' information requirements, this study sought to explore and assess user satisfaction pertaining to the reference services rendered by reference librarians. According to Ikolo (2015), users' express dissatisfaction with the response of reference librarians to queries, the time taken to provide information, the level of competence in addressing users' information needs, and the overall attitudes of reference librarians towards users. 302 postgraduate students participated in the completion of the questionnaires.

The data was systematically organized and subjected to analysis using frequency counts and percentages in order to address the research question that is in line with the study objective. Additionally, the chi-square test was employed at a significance level of $p < 0.05$ to determine the presence of a statistically significant relationship between the satisfaction levels of postgraduate students regarding the reference services offered by librarians across the chosen universities. The results are presented in Table 4.17.

Table 4.17: Perception of Postgraduate Students Regarding the Behavioral Performance of Reference Librarians on User's Satisfaction with Reference.

Items	MAU n=80				ATBU n=83				UNIMAID n=86				FUK n=53			
	S		D		S		D		S		D		S		D	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Response time	5	6.3	75	93.7	4	4.8	79	95.2	4	4.7	82	95.3	3	5.7	50	94.3
Quality of information	3	3.8	77	96.2	5	6.0	78	94.0	7	8.1	79	91.9	5	9.4	48	90.6
Competence in solving query	2	2.5	78	97.5	3	3.6	80	96.4	5	5.8	81	94.2	7	13.2	46	86.8
General behaviour of reference librarians	4	5.0	76	95.0	6	7.2	77	92.8	6	7.0	80	93.0	2	3.8	51	96.2
Aggregate	4.4		95.6		5.4		94.6		25.6		94.2		8.0		195 92.0	

S=satisfied, D=dissatisfied. Source: Study Data, 2022

Chi-square (χ^2) = (9) = 2.7642, $p = .0005$. The result is significant at $p < .05$

The findings indicate that a significant majority of respondents 75 (93.7%) from MAU expressed dissatisfaction with the services provided by reference librarians. This aligns with the data collected from ATBU 79 (95.2%), UNIMAID 82 (95.3%), and FUK 50 (94.3%), which also revealed a lack of satisfaction with the response time of reference librarians. However, a significantly low percentage of students from MAU 5 (6.3%), ATBU 4 (4.8%), UNIMAID 4 (4.7%), and FUK 3 (5.7%) have reported that reference librarians consistently demonstrate prompt responsiveness to users' queries, thus contributing to a satisfactory information seeking experience.

Furthermore, it is worth noting that a significant proportion of (MAU), specifically 77 (96.2%), expressed dissatisfaction with the quality of information provided by reference librarians to the students. This finding is consistent with the results obtained from other institutions such as ATBU 78 (94.0%), UNIMAID 79 (91.9%), and FUK 48 (90.6%). However, a percentage of 3 (3.8%) from the sampled population at MAU, 5 (6.0%) at ATBU, 7 (8.1%) at UNIMAID, and 5 (9.4%) at FUK expressed satisfaction with the quality of information provided to the respective patrons within the universities that were subject to investigation.

The study findings indicate that a significant majority of postgraduate students 78 (97.5%) expressed a high level of dissatisfaction with the competence demonstrated by reference libraries in effectively addressing patrons' queries. The extent of dissatisfaction is observed across the remaining three universities in the following manner: ATBU 80 (96.4%), UNIMAID 81 (94.2%), and FUK 46 (86.8%) respectively acknowledged dissatisfaction regarding the competence demonstrated by reference librarians in effectively addressing patrons' queries. Nevertheless, portions of postgraduate students hailing from MAU 2 (2.5%), ATBU 3 (3.6%), UNIMAID 5 (5.8%), and FUK 7 (13.2%) have conveyed their contentment regarding the proficiency of reference librarians in effectively addressing patrons' inquiries.

The analysis reveals that a significant majority of postgraduate students from MAU, specifically 76 (95.0%), expressed dissatisfaction with the overall conduct of reference librarians when it comes to delivering reference services. The findings align with those of ATBU 77 (92.8%), UNIMAID 80 (93.0%), and FUK 51 (96.2%), indicating a notable degree of dissatisfaction with the overall conduct of reference

librarians in delivering reference services. In contrast, a percentage of 4 (5.0%) of students from MAU, 6 (7.2%) from ATBU, 6 (7.0%) from UNIMAID, and 2 (3.8%) from FUK expressed satisfaction with the general behaviours of reference librarians during the provision of their services.

Given the similarity taken together based on the universities, postgraduate students from MAU 80 (95.6%) expressed dissatisfaction more than those from ATBU 83 (94.6%) but slightly similar to those from UNIMAID 86 (94.2%) however, postgraduate students in FUK 53 (92.0%) less expressed dissatisfaction compared to those from the other universities.

The study has successfully established a statistically significant relationship between the level of satisfaction among postgraduate students at the universities. The obtained results, specifically $(\chi^2) = (9) = 2.7642$, $p = .0005$, demonstrate a statistically significant finding at a significance level of $p < .05$. A noteworthy correlation exists between the satisfaction levels of postgraduate students in the various universities. This indicates that the responses from various universities are consistently similar, suggesting that none of the chosen institutions offer satisfactory reference services to their users. The present study presents contrasting results to the findings of Onyeisi, Ajisafe, and Toyese (2019), who posited a positive rapport between reference librarians and library patrons. Furthermore, it has been determined that the reference librarian provides tailored information services, as each individual user possesses distinct information requirements that may deviate from those of other users.

4.8 Challenges Experienced in Adhering to IFLA and RUSA Standards

To determine the potential factors contributing to user dissatisfaction with reference services, this study examines the obstacles that impede the ability of reference librarians to provide effective assistance during service delivery. Based on Smith's (2019) analysis, several key challenges are currently influencing the effectiveness of libraries worldwide. These challenges include a growing sense of mistrust towards government, a decline in confidence in objective information, reduced levels of civic engagement, the diminishing middle class, a tax revolt and the dominance of return on investment (ROI) considerations.

Additionally, there is a concerning decline in attention spans and reading habits, a lack of diversity and recognition, as well as ongoing struggles within library education. These issues collectively pose significant obstacles to the optimal functionality of libraries on a global scale. In order to ascertain the difficulties faced by librarians in the provision of reference and information services, 86 reference librarians were given a set of items to identify the specific challenges they encounter in their day-to-day operations.

However, only 81 respondents provided their input by completing the questionnaires. Furthermore, interviews were conducted with four library heads, all of whom provided responses to the interview questions. The data that has been collected and analyzed is presented in a manner that corresponds appropriately.

Table 4.18: Challenges of Reference Services and Adherence to Standards

Items n=81	MAU n=15				ATBU n=22				UNIMAID n=27				FUK n=17			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Inadequate Funding	12	80.0	3	20.0	19	86.4	3	13.6	23	85.2	4	14.8	15	88.2	2	11.8
Insufficient librarians' reference skills and competence	14	93.3	1	6.7	17	77.3	5	22.7	25	92.6	2	7.4	13	76.5	4	23.5
Decline in training for reference librarians	13	86.7	2	13.3	18	81.8	4	18.2	20	74.1	7	25.9	15	88.2	2	11.8
Inadequate infrastructure	10	66.7	5	33.3	16	72.7	6	27.3	21	77.8	6	22.2	11	64.7	6	35.3
Incompetent ICT skills	14	93.3	1	6.7	20	90.9	2	9.1	22	81.5	5	18.5	13	76.5	4	23.5
Insufficient information sources and collections	13	86.7	2	13.3	21	95.5	1	4.5	20	74.1	7	25.9	14	82.4	3	17.6
Inappropriate modes of communication in providing reference services	11	73.3	4	26.7	20	90.9	2	9.1	24	88.9	3	11.1	16	94.1	1	5.9
Aggregate		82.9		17.1		85.1		14.9		82.0		18.0		81.5		18.5

Source: Study Data 2022

According to the findings of table 4.18, a significant majority 12 (80.0%) of reference librarians expressed agreement regarding the challenge posed by insufficient funding to the overall quality of reference service provided to patrons in MAU. The outcome aligns with the findings derived from ATBU, which yielded a percentage of 19(86.4%). Similarly, UNIMAID reported a percentage of 23(85.2%), while FUK recorded a percentage of 15(88.2%). A minority of MAU 3(20.0%) expressed disagreement regarding the insufficiency of funding as a primary obstacle to the provision of effective reference services in MAU. The divergent perspectives encompass 3(13.6%) from ATBU, 4(14.8%) from UNIMAID, and 2(11.8%) from FUK. These findings suggest that factors beyond insufficient funding may contribute to the suboptimal provision of reference services by reference librarians in the chosen universities being examined.

To further support the above-mentioned presentation, the interaction with the four heads of library who were interviewed regarding the same topic yielded the subsequent responses:

Insufficient funding persists for an operational reference service delivery within the university library. The library has sought additional funding from alternative sources to support reference services. These sources include the sale of library registration forms for students, as well as scanning and printing services for documents. However, it is important to note that these revenue streams have not significantly contributed to the library's ability to effectively fulfil its daily operational service delivery requirements (R1).

The findings indicate that there are notable similarities in the responses obtained from the universities under investigation. However, it is worth mentioning that there were no significant differences observed among the library heads interviewed at various locations and at different times, without proximity being a factor. For example, R2, the second in command of the library, confirmed that

The primary source of funding for the library is derived from an internal budget allocated by the university, which has proven insufficient to adequately support the library's operations. As the university receives complete funding from the federal government, the library management is entirely reliant on government support (R2).

University libraries require funding to obtain more than only reference and information sources. University libraries require adequate cash to allocate for technological upkeep. Lack of financing has an impact on library growth, causing library administrators to seek alternate funding sources. The lack of a long-term alternative funding mechanism for the library exacerbates the already difficult impact on service delivery. The interview with R3, the library's third head, confirmed:

The government intervention program facilitated by TETFUND has historically proven to be beneficial. Lately, the government established

additional universities and introduced new academic programs in existing ones, without a corresponding increase in funding allocation to universities nationwide. This has resulted in reduced funding, which in turn has had a negative impact on the effective functioning of reference services within the institution (R3).

There have been major disagreements between the staff of universities and the government due to inadequate funding, which can be attributed to the proliferation of universities and programmes within existing institutions. Consequently, a prolonged period of strike action, for eight months in 2022, across the country's universities, with no viable resolution in sight. The opinion of R4, the fourth head of library, remains consistent with the previously mentioned discussions.

In recent times, there has been a lack of adequate funding, and alternative sources of funding, such as student registration fees and expenses related to document preparation, have proven to be unsustainable. The impact of this situation on the library's operations has been significant (R4).

The responses obtained from library directors revealed that funding has been limited, affecting many aspects of library operations such as staff training and development, attendance at conferences, seminars, and workshops, procurement of available reference resources, and up-to-date collections.

Upon conducting a more comprehensive analysis of the issue, it has been determined that a significant majority of 14(90.3%) of respondents from MAU have expressed concerns regarding the inadequacy of reference librarians' abilities and competency. This deficiency has consequently impeded the efficient provision of reference services. ATBU 17(77.3%), UNIMAID 25(92.6%), and FUK 13(76.5%) all reported lack of reference librarian skills and competence as a hindrance to efficient reference

services. In contrast, just 1(6.7%) of MAU, 5(22.7%) of ATBU, 2(7.4%) of UNIMAID, and 4(23.5%) of FUK concurred and stated that reference librarian skills and competency have never been an impediment to attaining effective reference service delivery in their respective institutions. The interaction with R1, the initial library head, plainly conveyed that:

Despite having undergone training as librarians, a considerable portion of individuals within this profession exhibit a deficiency in the necessary skills and aptitude to proficiently provide patrons with high-quality reference services. (R1)

The provision of high-quality reference services relies heavily on the essential skills and aptitudes possessed by reference librarians. Despite the implementation of staff training initiatives, a significant portion of individuals continue to encounter challenges when applying the acquired skills in practical scenarios due to a lack of proficiency. Additional verification was obtained from R2, the second head of library services, during the interview, wherein he expressed:

The proficiency and aptitude of staff members are of utmost importance in ensuring the efficacy of reference services. However, it has been observed that in recent times, these skills and competencies alone are not adequate to substantially enhance the delivery of reference services with a primary focus on user satisfaction (R2).

The overall effectiveness of reference services is contingent upon user satisfaction. In instances where users' express dissatisfaction, it serves as an indication of inadequate service delivery. There exists a correlation between the satisfaction of library users and the skills and competence of reference librarians. This is because a high level of user satisfaction contributes to the maintenance of a positive microclimate within the library and enhances its reputation.

The findings demonstrate consistency, as the third head of library, referred to as R3, expresses a similar opinion during the interview:

Many librarians may struggle to effectively manage the evolving landscape of library services due to a lack of adequate skills and competencies required to navigate digital reference service platforms, as outlined by the prevailing global standards of contemporary times (R3).

It is crucial for universities to prioritize the assignment of reference librarians who possess the necessary skills and competence to effectively manage contemporary library services. This strategic allocation of roles will greatly contribute to enhancing user satisfaction. Insufficient training of staff in both technological proficiency and behavioral skills poses a challenge in ensuring the delivery of high-quality service by reference librarians. The interview conducted with R4, the fourth head of the library, offers valuable insights and clarifications regarding the subject matter:

Insufficient post-training follow-up in the development of essential reference service skills, encompassing both digital and behavioral competencies, adversely affects the effective execution of reference service delivery of superior quality (R4).

The findings are in line with a study conducted by Luo and Buer (2015), which revealed that users perceive reference librarians to be more effective in delivering customer service compared to their ability to identify users' information needs, conduct searches, and locate relevant sources of information. Additionally, the study highlighted the importance of reference librarians demonstrating sufficient reference skills and competence. In addition, 13(86.7%) reference librarians from MAU alongside their counterparts from ATBU 18(81.8%), UNIMAID 20(74.1%) and FUK 15(88.2%) agreed that the decline in training for reference librarians has affected the smooth operation and library services particularly, reference services. However,

certain reference librarians across the universities; MAU 2(13.3%), ATBU 4 (18.2%), UNIMAID 7(25.9%) and FUK 2(11.8%) did not consider the decline in training for reference librarians as an indicator capable of impact negatively to efficient reference services. A close observation of the results show consistency across the four universities reference librarians, which confirmed that professional reference training for reference librarians, is inadequate.

Training programs for reference librarians on service delivery have not been consistent because there are no working policies for staff training across the selected universities (R1).

The previous response indicated that the interviewee recognized that the persistence of training issues and the resulting challenges faced by reference services can be attributed to the lack of sustainable training policies implemented by institutions. This has consequently had a detrimental impact on the overall quality of library operations, specifically in the realm of reference services. Another version on how training has decline and in turn affect the quality of reference librarians and service delivery was buttressed by R2-the second head of library interviewed and he said:

Where the policies are working, most reference librarians do not take the scholarship opportunities provided by the system therefore they intentionally refuse attending training such as seminars, workshops, conferences and additional qualifications to ensure quality human capital development (R2).

The training quality had a notable impact on the trainees' ability to acquire the appropriate knowledge and skills necessary for staff development. This account aims to elucidate the factors contributing to the diminished impact of most staff members

on the system subsequent to their training. During the interview, R3, the esteemed head of the library, made a noteworthy statement:

Many training schedules often inundate trainees with an excessive amount of information within a limited timeframe, leading to feelings of overwhelm and disengagement from the training process. Occasionally, individuals who persist end up without acquiring any knowledge that would be beneficial to the overall system (R3).

The introduction of new technologies frequently presents a range of challenges for staff members. However, by equipping the staff with appropriate guidance and training materials, the process of adopting and utilizing these new technologies can be significantly enhanced, resulting in improved acceptability and functionality. The correlation between expectations and enhanced levels of engagement and productivity is frequently observed. The interview conducted with the fourth head of the library, referred to as R4, resulted in the following findings:

Librarians often express a positive reception towards the introduction of new technologies aimed at enhancing service delivery. However, their level of participation in training programs tends to be limited, as they perceive it as burdensome. Certain individuals exhibit a strong inclination to oppose any form of change. In such instances, it is important to acknowledge that no level of training will be effective in rectifying the prevailing circumstances (R4).

The data collected from reference librarians and library heads at the chosen universities substantiated a notable decrease in the provision of training as a significant challenge encountered in delivering reference services to library patrons. The challenges revolve around the institutional policies regarding training and the perception of reference librarians when it comes to embracing change and actively seeking training opportunities.

The result indicates that 10(66.7%) reference librarians from MAU agreed that inadequate infrastructures stand tall against efficient reference service delivery. This result aligns to those of ATBU 16(72.7%), UNIMAID 21(77.8%) and FUK 11(64.7%) share similar views on the subject matter. However, 5 (33.3%) from MAU, 6(27.3%) from ATBU, 6(22.2%) from UNIMAID and 6(35.3%) from FUK reported that inadequate infrastructure does not account for poor reference services delivery.

Response obtained from R1-the first head of library added that:

Insufficient infrastructures exist for the effective implementation of contemporary reference services. The government's investment in library and reference service resources is limited owing to financial constraints. While the reference librarians may be inclined to offer high-quality service, there is a lack of adequate infrastructure for both traditional and digital reference services (R1).

The results further revealed that, reference services experienced inadequate library infrastructure as majority of the respondents stated that inadequate library infrastructure has posed serious challenge to librarians during service delivery, many respondents indicated lack of adequate space to provide effective and efficient reference services stand against reference service provision and adherence to standards. The conversation with R2-the second head of library affirmed that:

The limited availability of physical infrastructure is impeding librarians' ability to provide consumers with high-quality reference services (R2)

Insufficient ICT resources and equipment ranging from limited number of functional computers, internet facilities to carter for online reference service platform and poor user education on the utilization of IT environment in providing quality and

satisfactory service delivery are part of the insufficient infrastructure. R3-the fourth head of library added that:

The majority of existing infrastructures are outdated and ineffective in meeting the demands of contemporary reference services (R3).

Limited infrastructures posed several problems primarily the physical absence in some places, and non-functionality in libraries were available, as these has not made reference librarians function accordingly. R4-the fourth head of library services in an interview added that:

The available infrastructure does not cater for digital and traditional reference services, as there are limited space and insufficient computers, among other resources (R4).

Responses gathered showed that inadequate infrastructure ranging from space, resource digital and traditional references, ICT resources affects efficient library operations particularly reference service delivery. Furthermore, 14(93.3%) reference librarians from MAU agreed that incompetent ICT skills has posed severe impediment to contemporary reference services. Similarly, the responses aligned to those of ATBU 20(90.9%), UNIMAID 22 (81.5%) and FUK 13(96.5%) confirmed that reference librarians ICT skills is insufficient to carried out a standard reference service. However, 1(6.7%) reference librarians from MAU hold a contrary view about the poor quality of reference services offered by reference librarians. This is consistent to those findings obtained ATBU 2(9.1%), UNIMAID 5 (18.5%) and FUK 4(23.5%) who affirmed reasons other than reference librarian ICT competence for reference delivery. The interview conducted with R1-the first head of library confirmed that:

One impediment to service delivery in line with IFLA and RUSA standards dwell on the fact reference librarians ICT Skill is above-average requirement to do the job but continuity

due to inadequate resources and equipment tempered with the level of utilization to ensure competence thereby availing only few to utilize ICT resources (R1).

The above response by head of library indicated that, revealed that most of the librarians have required ICT skills to perform effective reference service to patron but the right infrastructure and resources are lacking. R2-the second head of librarians affirmed that:

Reference librarians have required ICT skills, but inadequate resources and equipment provided an avenue where only few librarians constantly utilized and improving their competence while others remain dormant (R2)

This response does not differ from those obtained from other librarians interviewed in the course of the study. The problem is further confirmed by R3-the third head of library in a different way:

Insufficient ICT competence has been a setback to effective reference services as majority of the reference librarians do not have requisite ICT skills despite the enabling environment and resources (R3).

The findings are consistent across the universities confirming that insufficient ICT skills has been a problem towards the realization of high-quality reference services to patron. The opinion of R4-the fourth head of library affirmed that:

The library and reference services librarians have invested time and effort in learning ICT skills to utilize in order to improve the quality-of-service delivery but often times after the training the librarians often lack ICT resources to ensure practical continuity (R4).

The findings revealed that 13(86.7%) of reference librarians from MAU agreed that one of the problems faced by reference librarians in service delivery is insufficient information sources and collections. The result is consistent to those of ATBU 21(95.5%), UNIMAID 20(74.1%) and FUK 14(82.4%) confirmed that insufficient

reference and information resources has posed serious challenge to service reference service delivery across the universities. Limited numbers of the librarians have contrasting views; specifically, MAU 2(13.3%), ATBU 1(4.5%), UNIMAID 7(25.9%) and FUK 3(17.6%) disagree that insufficient information resources have never been a problem of quality reference services across the universities. R1-the first head of library interviewed provided that:

Insufficient information sources and collection in the university has been a problem to reference service delivery and has made referral services poor as well as users' dissatisfaction in terms of information acquisition (R1)

The responses from the interviewees showed that the libraries experience poor information and collection sources, which have over time affected reference librarians, service delivery. The conversation with R2-the second head of library affirmed that:

There are no adequate information sources and collections in the library and the current state of information sources and collection is not meeting the daily needs for now, which is attributed to inadequate funding (R2)

Funding has been a universal problem to proper library functioning because it affects every aspect of the library management in areas of funding, training, and resources.

The conversation with R3-the third head of library confirmed that:

The acquisition of reference resources, collection and staff training has been major challenges faced by reference librarians in carrying out their duties in line with IFLA and RUSA standards (R3).

The findings indicated that 11(73.3%) reference librarians agreed that inadequate modes of communication in providing reference services have been a problem to

effective reference service delivery in MAU. The result is not different to those of ATBU 20(90.9%), UNIMAID 24(88.9%) and FUK 16(94.1%) who affirmed that inadequate modes of communication in providing reference services to patrons has been an impediment to effective reference services. Limited proportion of reference librarians from MAU 4(26.7%), ATBU 2(9.1%), UNIMAID 3(11.1%) and FUK 1(5.9%) have factors other than inadequate modes of communication in service delivery hence disagreed with the majority. The interview conducted with R1-the first head of library affirmed that:

To some extent, the modes of communication do not follow standard professional ethics because every library adapts a way to suit its client with the minimum best practices (R1).

The responses above demonstrated that variation in terms of modes of communication of reference librarians based on the universities have affected the working environment. R2-the second head of library confirmed that:

There is no uniformity in the mode of communication among librarians which has often posed a serious challenge where client choose who attend to them in some instances (R2).

Communication is essential to the effectiveness of library reference services. It includes the conscious sharing of ideas, emotions, thoughts, and other nonverbal signs and signals that people share. The discussion with R3-the third head of library affirmed that:

Most librarians have failed to adopt contemporary best practices through adoption of effective modes of communication (R3).

Inability of reference librarians to adopt contemporary best practices through adoption of effective modes of communication has been an impediment to effective service delivery. A confirmation was gotten from R4-the fourth head of library in an interview revealed that:

Failure to adopt best practice by adopting effective communication modes in providing reference service delivery has affected the functional reference service delivery to patrons (R4)

Overall, the survey findings indicate that 15 reference librarians from MAU, accounting for 82.9% of the respondents, expressed agreement with the identified issues that hinder the provision of reference services in their university. Nevertheless, a significant majority of reference librarians, specifically 22(85.1%) of the total, have collectively assessed ATBU as an institution that faces considerable challenges in effectively providing reference services while adhering to appropriate behavioral standards and norms. Moreover, it is worth noting that these challenges are prevalent across UNIMAID, with an overall acceptance rate of 27(82.0%). This suggests that these issues may be more effectively addressed in other institutions, as evidenced by FUK's cumulative frequency of 17(81.5%), which surpasses that of UNIMAID.

Based on the findings of the data analysis, it can be observed that there are several obstacles that hinder the effectiveness of the reference service offered by academic libraries in the Northeast region of Nigeria. The study found several which include poor financing, inadequate library infrastructure, and insufficient ICT resources and equipment. These concerns were uncovered through the administration of questionnaires and interviews with library directors. Other factors that contribute to the challenges faced in a library setting are the inadequacy of staff, the nonchalant

attitude displayed by users, the lack of comprehensive training in professional reference services, the insufficiency of information sources and collections, the behavior of patrons, and their ability to effectively articulate their inquiries. This study aligns with the research undertaken by Abdullahi and Mamza, (2014) regarding the efficacy of reference services in meeting the information requirements of students at tertiary institutions in Nigeria where the author revealed that there was a deficiency in both human and material resources, leading to inadequate service supply in meeting the information requirements of the students.

In addition, the insufficiency of electronic resources, the lack of relevance in the available materials, the incompetence of reference librarians, and power outages were identified as contributing factors to the libraries' inability to fulfil the information needs of its users, leading to requests for resolution. In a research conducted by Ayanlola and Uchendu, (2019) about the supply of reference services in Nigerian libraries, it was discovered that many variables exert an influence on the delivery of such services. Several factors contribute to the challenges faced in the provision of information and communication technology (ICT) services in academic settings.

These factors encompass a lack of ICT facilities and expertise, insufficient funding, inadequately qualified personnel, limited dissemination of relevant information, subpar communication and telecommunication infrastructure, and outdated reference collections. Additionally, irrational patron behavior further compounds these issues.

These findings align with the research conducted by Malik and Mahmood, (2014), which revealed that the ICT infrastructure necessary for establishing and implementing an effective DRS in libraries has improved compared to previous years,

although more advancements are still necessary. Information and Communication Technologies (ICTs) have employed such capabilities. According to Jordan, (2012) research findings, there is a notable disparity in the adoption of information and communication technology (ICT) between older librarians and their younger counterparts. This observation aligns with the outcomes reported in their study. The findings of a survey conducted by Ukachi, (2010) revealed that a significant majority of librarians, namely 90.5%, have a high level of knowledge and skills in information and communication technology (ICT). However, it is important to note that these results contradict the findings of the current study. In order to achieve success and provide the intended outcomes, it is imperative for an organization's workforce to possess a high level of proficiency, expertise, and self-assurance.

Moreover, the inherent characteristics of libraries across all domains suggest that they undergo continuous transformations, especially in the contemporary era dominated by digital advancements in information technology. Likewise, it is important for libraries to possess the ability to adjust, be flexible, and continuously evolve in response to the prevailing political and economic conditions (Appleton, 2018). In order to embrace and adapt to change, it is imperative for the personnel of a library to consistently enhance their professional and technical competencies. Accordingly, Panda, (2020) asserts that it is imperative for librarians to acquire essential abilities and skills pertaining to information and communication technology (ICT)-driven communication.

Abdullahi and Mamza, (2014) found that reference sources hold immense value as they serve as valuable repositories of knowledge for consumers in search of pertinent

and meaningful content. Quadri and Abiodun, (2017) conducted a study on the availability and use of reference sources and services. The findings of the study suggest that the majority of participants said that reference sources are widely accessible, readily available, and sufficiently comprehensive, with the exception of geographical sources, which were reported as lacking in availability, accessibility, and adequacy.

Numerous years of scholarly inquiry and theoretical exploration have indicated that the principles of communication science have had a substantial role in shaping the professional duties of reference librarians (Lund, 2020). Furthermore, Lund (year) established that the Anxiety-Uncertainty Management Theory offers valuable insights into the attitudes of communicators and the significance of nonverbal signs in comprehending the breakdown of communication encounters within reference services. This observation has the potential to uncover aspects of reference service that require enhancement in order to cultivate a culture of effective communication inside the library

4.8.1 Best ways to deal with the identified challenges

The effective implementation of appropriate managerial procedures can effectively mitigate the many obstacles encountered in reference services. Aliyu (2015) argues that it is imperative to incorporate mandatory information technology education into all levels of our formal education system. In order to conduct a more comprehensive investigation, the open-ended questionnaire was distributed to 86 reference librarians. Out of this sample, 81 librarians diligently completed and returned the questionnaire.

The responses provided by these librarians give potential answers to the issues encountered by reference librarians. The collected responses were subjected to thematic coding and afterwards presented in the following manner:

4.8.2 Adequate funding

The study revealed that in order for the library to fulfil its crucial function of facilitating effective and efficient teaching, learning, and research, it is imperative to ensure sufficient funding. According to 78 reference librarians across the four universities affirmed that, sufficient financial resources facilitate the provision of reference materials, information sources, and necessary services by the library, therefore meeting the information requirements of its users.

Allocating enough financial resources to these libraries is of utmost importance. The provision of financial assistance is necessary in order to improve both the quality and quantity of resources, amenities, and provisions offered by the library.

The findings are consistent with the research conducted by Aghauche, (2005). Aghauche asserts that in order to effectively mitigate the decline and significant deterioration of academic libraries in Nigerian universities, it is crucial to prioritize and secure sufficient funding. It is imperative for the library to fulfil its vital role effectively and efficiently in facilitating teaching, learning, and research.

4.8.3 Supply of sufficient ICT resources and equipment

The research conducted confirmed that information and communication technology (ICT) tools, including computers, telecommunication devices, various resources, and associated technologies should be provided according to 80 reference librarians. The respondents affirmed that these resources and equipment are essential resources for delivering reference and information services effectively, in accordance with the

standards set by the International Federation of Library Associations and Institutions (IFLA) and the Reference and User Services Association (RUSA).

Sufficient ICT resources and equipment are required for a better reference services. The availability of these resources has significantly proven to enhance the provision of reference services hence should be taking into account.

The findings of this study align with previous research conducted by Echedom and Ozioko, (2011) and García-Umaña and Tirado-Morueta, (2018). These researchers have identified several key ICT resources that are crucial for achieving sustainable user satisfaction through effective and efficient reference services. Reference librarians suggest the following resources:

Computers, internet access, electronic mail (e-mail), the World Wide Web (WWW), video conferencing, printing technology, and online public access catalogues (OPACs).

4.8.4 Provision of Computer and Information Literacy.

The study posited that the enhancement of computer and information literacy is necessary in order to improve the performance of reference librarians, in accordance with the recommendations set out by IFLA and RUSA. This would facilitate the development of information literacy skills, enabling librarians to identify information needs and effectively locate, evaluate, and utilize the required information.

Provision of computer and information literacy is necessary to carter for the problem of staff competence and training deficit in general. Doing so appropriately would enhance their knowledge and proficiency in utilizing computers and technology, including computer programs and other associated applications, while effectively operating them.

The recommendation is in line with the findings of Padme *et al.*, (2021), who proposed that in order to deliver high-quality reference services to consumers, it is

essential to establish excellent orientation programs that address both computer and information literacy effectively.

It is important for the university administration to consistently offer support to the library in order to enhance their policies and services aimed at fostering computer literacy, internet research capabilities, and awareness of the many databases accessible within library settings.

4.8.5 Human Capital Development

The research recognized the development of human capital through training and retraining of personnel as one of the strategies for addressing issues faced during reference service delivery and ensuring adherence to standards. The study proposed that 81 reference librarians consider human capital development as imperative for management to offer sufficient assistance and training in relation to existing reference services.

Address these challenges and improve high-quality reference service, there is the need for human capital development as this would effectively address the bottleneck encountered in the delivery of reference services and ensure adherence to standards without any form of bias.

It has been determined that staff members should consistently engage in the adoption of innovative practices and enhancements in order to enhance reference services and develop programs that seek to increase customer satisfaction and meet their information demands. This can be achieved through training and the format for training received a universal opinion by the reference librarians investigated:

Training can be conducted through various means such as seminars, workshops, practical exercises, scheduled lectures, and the provision of both print and electronic self-learning resources.

This is consistent with the findings of Kadir and Singh, (2015), who proposed that when faced with a shortage of staff, library administrators should promptly provide training to new employees and students on the proper execution of reference services in accordance with the standards set by IFLA and RUSA. It is imperative to ensure that comprehensive training programs are implemented in public academic libraries. These programs are designed to instill confidence among staff members in utilizing new technologies, while also fostering a positive attitude and enthusiasm during the delivery of reference services.

4.8.6 Provision of Adequate Information Sources and Collection

The research conducted in this study revealed that participants recommended the availability of comprehensive sources of information, including periodicals, newspapers, conference papers, dissertations and theses, patents, standards, trade and product bulletins, bibliographies, books, pamphlets, manuscripts, electronic sources, and journals.

Information sources and collections are essential resources needed for effective reference service delivery. These resources are deemed significance for the effective provision of reference services, aligning with the standards set by IFLA and RUSA.

The results were consistent with the findings of Subhash and Krishnamurthy (2014), which indicated that the information sources available in university libraries were insufficient in terms of quantity and did not meet the users' demands in terms of quality. Hence, the provision of sufficient information sources is crucial in order to deliver high-quality reference services that enhance work performance and guarantee customer pleasure. Abdullahi and Mamza (2014) argue that it is imperative to prioritize the recruitment of qualified librarians and the provision of contemporary

information technology resources, such as computers and internet connectivity, in order to facilitate students' access to a vast array of knowledge. It is recommended that libraries organize training sessions for reference librarians with the aim of enhancing the quality of services provided to library users.

It is advisable to promote the use of reference materials among students for supplementary purposes, such as accessing information and facilitating communication, since these resources can offer up-to-date study findings and current news updates. The current situation necessitates a prompt collaboration between administrators of higher institutions and librarians in order to ascertain the most efficient methods of addressing the information needs of the user population.

It is imperative to recognize the importance of addressing the urgent need for enhanced power supply, irrespective of the presence or absence of resources and services. The careful selection of information resources is paramount in order to guarantee that all procured resources are useful to users and provide suitable infrastructure.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter offers a comprehensive overview of the research findings. The study's findings are thoroughly examined, along with conclusion and corresponding recommendations for policy implementation and recommendation for future research.

5.2 Summary of Findings

5.2.1 Reference Services Provided and their Delivery Methods in Accordance to IFLA and RUSA Standard Practice

This particular segment of the study focuses on the examination of reference services offered by reference librarians within the Federal University libraries located in the Northeast region of Nigeria. The analysis conducted revealed that a significant number of respondents from the chosen universities expressed their satisfaction with the provision of conventional (in-person) reference services. These services include information provision, verification of bibliographic documentation, inter-library loan and document delivery services, user education, and reprographic services. However, the provision of these services is contingent upon the availability of resources and adherence to university policies. For example, while information services are offered at all universities, the efficiency and effectiveness of service delivery vary. Specifically, ATBU, UNIMAID, and FUK demonstrate a higher rate of service delivery compared to MAU. These findings encompass various additional services, including bibliographic verification documentation, inter-library loan and document delivery services, user education, and reprographic services, which vary in terms of their extent of provision. The study has determined that various digital reference

service methods are being implemented in libraries to effectively meet the needs of users. These methods include email, web forms, "asks a librarian," chat (utilizing instant messaging and social media applications), and videoconferencing. The research findings indicate that the libraries chosen in Northeast Nigeria offer traditional in-person reference services in addition to the provision of these references via digital reference channels mentioned earlier. The approach to reference services among universities may differ, with many reference librarians at selected institutions prioritizing the use of the "Ask a Librarian" channel as their primary means of assisting patrons. The availability of digital technologies, along with the ICT competence of reference librarians and patrons, contributes to the provision of high-quality reference services that are tailored to meet the satisfaction of users.

5.2.2 Perception of Postgraduate Students on Reference Librarians Behavioral Performance in line with IFLA and RUSA Reference Service Standard Practice

5.2.2.1 Perception of Postgraduate Students on Reference Librarians Behavioral Performance in line with IFLA Reference Service Standard Practice

The study investigated the level of adherence among librarians to IFLA reference standards in a sample of university libraries, utilizing students' evaluations of the behavioral performance of reference librarians. The study's findings have established that reference librarians consistently deliver reference services in accordance with reference standards without taking into account guidelines, as indicated by the students' evaluation report. However, it is worth noting that this report varies across the universities that were investigated using components of general guidelines, content guideline, chat guideline and chat session. The findings derived from the collected, analyzed, and presented data indicate that a majority of the respondents, specifically postgraduate students, did not express agreement with all the items on the

questionnaire. Conversely, only a small number of respondents demonstrated solidarity with the items. It has been determined that the behavioural performance of reference librarians in various universities exhibits similarities, albeit with varying degrees. Some instances demonstrate lower performance, while others show moderate or high levels. The assessment findings clearly indicate that the provision of reference services aligns fairly with the reference service standards set by IFLA.

5.2.2.1 Perception of Postgraduate Students on Reference Librarians Behavioral Performance in line with RUSA Reference Service Standard Practice

The RUSA Guidelines were utilized as the basis for establishing the parameters for evaluating the behavioral performance of librarians to determine the extent to which they adhere to the RUSA guidelines in the study. The research revealed that the degree to which reference librarians adhere to the indicators outlined in the RUSA guidelines, specifically in terms of Visibility and Approachability, Interest, Listening and Inquiring, Searching, and Follow-up in their service delivery, was deemed insufficient for achieving international recognition. It has been observed that the users in the selected libraries are experiencing a deficiency in the provision of high-quality service. As per the user's request, I will now proceed to rewrite their text in a more professional manner. It has been observed that librarians may not consistently adhere to the principles outlined in the RUSA (Reference and User Services Association) essentials when delivering high-quality reference services and user support. The evaluation report conducted by students indicates that reference librarians consistently adhere to reference standards when providing reference services. However, it also highlights that their behavioral performance does not align with the specified standards set by RUSA. It is important to acknowledge that this report exhibits variations among the universities that were examined. The results obtained from the

data collection, analysis, and presentation suggest that a significant proportion of the participants, particularly those pursuing postgraduate studies, did not demonstrate consensus on all the items included in the questionnaire. In contrast, a limited proportion of participants exhibited support for the items. It has been ascertained that the behavioral performance of reference librarians in different universities demonstrates similarities, although with varying degrees. Certain instances exhibit subpar performance, whereas others display moderate to high levels of achievement. Based on the assessment findings, it is evident that the provision of reference services is reasonably aligned with the reference service standards established by the RUSA.

5.2.3 Information Needs of Post Graduate Students

The study investigated the information requirements of postgraduate students with the aim of identifying the specific types of inquiries that students present to reference librarians for delivering effective services. The research findings have identified several noteworthy information needs among postgraduate students. These include the need for up-to-date awareness regarding academic development and scholarship, access to information on research activities, the requirement for continuous professional knowledge updates, and the necessity for guidance on seminar and article writing. It is imperative that the information requirements of students at various universities were consistently aligned with a significant majority expressing agreement with the aforementioned statement. One of the primary functions of reference services is to provide users with up-to-date information regarding advancements in their respective areas of interest. In this regard, CAS diligently ensures that users are informed about the latest publications available. In the present era of abundant information, where access to information is facilitated through various channels, university libraries actively adopt and consistently employ CAS

(Current Awareness Services) to effectively engage with their diverse patrons. Postgraduate students would benefit from utilising the "Ask a Librarian" service and other online interactive platforms in their quest for information. These services would allow students to ask questions and engage with reference librarians, as well as provide selective dissemination of information services. This would enable students to access current studies and new developments in their desired field.

5.2.4 User Satisfaction with Reference and Information Service

The study assessed the level of satisfaction among postgraduate students in the chosen University libraries regarding the behavioral performance of reference librarians, in accordance with established reference guidelines. A notable observation has been made regarding the dissatisfaction of postgraduate students with the response times offered by reference librarians during their information-seeking endeavors, this is consistent across the selected universities. Furthermore, there appears to be a misalignment between the quality of information required by students and their corresponding expectations, resulting in a notable level of dissatisfaction being expressed. According to the findings of the study, it was observed that students expressed dissatisfaction with the level of competence displayed by the reference librarians in resolving queries and the students rated general behaviour exhibited by the reference librarians as unsatisfactory.

5.2.5 Challenges Experienced in Providing Reference Services and Adhering to Standards

The collected data was collectively managed and coded according to the observed similarities among all the selected items. The study identified the specific areas in which reference librarians encountered challenges while performing their professional responsibilities, which are outlined as follows: The challenges faced in the provision

of reference services include limited funding, a lack of expertise among reference librarians, inadequate training in professional reference service, subpar infrastructures, a deficiency in competent ICT skills among reference librarians, a shortage of information sources and collections for reference service provision, and ineffective modes of communication in delivering reference services. The study revealed that the provision of reference services in the selected universities has a consistent impact, with no discernible disparities observed in the pattern of responses.

5.2.6 Best ways to deal with the identified challenges

The data collected from the participants revealed that it is crucial to provide sufficient funding for academic libraries in order to enhance the quality and quantity of library materials, facilities, and services, aligning with the standards set by IFLA and RUSA. Additionally, it is essential to ensure the availability of adequate ICT resources and equipment, including computers, internet access, email, the World Wide Web, video conferencing, printing technology, and online public access catalogues (OPAC). These resources and equipment are fundamental in improving the effectiveness of reference librarians in delivering high-quality reference services that aim to meet the satisfaction of library users. The consistency of this finding is evident across all four universities included in the study, as the suggestions provided align closely with the objective of enhancing the efficiency and effectiveness of reference services.

The findings from participants at the four universities (MAU, ATBU, UNIMAID, and FUK) indicate that it is important to provide computer and information literacy training to reference librarians. This training would enable them to identify when information is required and effectively locate, evaluate, and utilize the necessary information. Additionally, enhancing their knowledge and proficiency in using

computers and technology, including various computer programs and applications, is crucial. Developing these basic computer skills would greatly contribute to the establishment of robust reference services that align with the standards set by IFLA and RUSA.

The research has revealed that in order to ensure efficient delivery of reference services in accordance with the standards set by IFLA and RUSA, it is crucial to focus on human capital development and the provision of comprehensive information sources and collections as suggested by participants across the four universities investigated. These sources include periodicals, newspapers, conference papers, dissertations and theses, patents, standards, trade and product bulletins, bibliographies, books, pamphlets, manuscripts, electronic sources, and journals. Additionally, effective communication modes play a vital role in this process.

5.3 Conclusions

The study sought to assess adherence to reference service standards for service delivery in selected federal university libraries in Northeast Nigeria as a tool for providing effective reference services aimed at users' satisfaction.

Firstly, the study sought to identify the types of reference services provided to users at the four universities library and the method of delivery of the reference services. The study concluded that various types of traditional reference services are offered in the universities by reference librarians but at various levels meaning some of the universities do more than others and most of these libraries have adopted digital platform as a means of providing reference services to users.

Secondly, the study sought to evaluate the perception of postgraduate students on behavioural performance of reference librarians' from where the researcher determines the extent of adherence to service standard by the reference librarians. Since the responses across the four universities are similar to a great extent, the study concluded that, reference librarians' behavioural performance are in variant to set standards.

Thirdly, the study examined the postgraduate students needs with consistency across the four universities under investigation. The study concluded that postgraduate students often need information of current awareness on academic development and scholarship, research activities, update professional knowledge and information on seminar and article writing.

Fourthly, the study examined the level of satisfaction of postgraduate students with the behavioural performance of reference librarians and concluded that postgraduate students are not satisfied with response time, quality of information obtained in the quest for information, the degree of competence displayed by librarians in solving their query and the general behaviour of reference librarians.

Lastly, the research investigates the impediment faced by reference librarians in the course of service delivery and concluded that, poor financing, poor library infrastructure, and insufficient ICT resources and equipment are among the issues highlighted by the reference librarians. Other issues include insufficient staff, a nonchalant attitude among users, insufficient professional reference service training,

insufficient information sources and collections, patrons' inability to formulate inquiries correctly.

5.4 Recommendations

Following the preceding summary and conclusion, the following recommendations for universities to improve adherence to reference service standards in service delivery in university libraries in northern Nigeria are provided.

5.4.1 Recommendations for University Libraries

- i. It is imperative for proper funding of libraries as this will improve staff quality through training, cutting-edge information technology infrastructure, computer hardware/software and Internet connectivity that will enhance the utilization of conventional reference services with digital reference channels.
- ii. Reference librarians should take advantage of training that will have a direct influence on their behavioural performance. This would enhance contact between librarians and patrons, which would increase user satisfaction by providing good reference and information services while demonstrating professional behaviour in accordance with RUSA and IFLA principles.
- iii. Reference librarians should prioritise patron information requirements by responding to them in the shortest available time period. This would increase customer happiness while also establishing a strong relationship between the reference librarian and the patron.
- iv. Reference librarians must adapt their behaviours throughout service delivery, regardless of medium of delivery, to ensure reaction speed, quality information, and to increase their skill in handling customer concerns. This would increase customer satisfaction.

- v. The government and stakeholders must recognise the need of proper financing, resources, and staff training in order to encourage employees to do their best in avoiding issues that may come from personal behaviour.

5.4.2 Recommendations for the Policy

From the study findings the researcher recommends the following:

- i. Library funding policies for successful service delivery should be reviewed to provide enough funding for infrastructure, training, and reference librarians welfare.
- ii. Librarian training policies are required to ensure adherence to reference services standards in the training of librarians and information services workers in universities. Librarians must be trained at universities to become service providers rather than just workers.
- iii. Employment policies should be revised to ensure strict adherence to designation, and a bond of return before training clearance for reference librarians should be enforced to prevent brain drain. This would reduce training and recruitment costs for new reference librarians.

5.4.3 Recommendations for Further Research

The study recommends further research on the following:

- i. Future research may look at information demands supplied by users, allowing these standards to be used to assess patron-reference librarians' interaction in providing services.
- ii. Furthermore, the level of adherence to the guidelines in real-time conventional and digital reference transactions should be examined; this study is limited in that it only includes reference transactions conducted via conventional and some digital (e-mail, ask a librarian) an asynchronous channel, and may not be

indicative of other virtual reference services conducted via synchronous channels. Future research should look at the link between several factors and virtual user satisfaction.

- iii. Finally, further research on how and why librarians' behaviour differs when dealing with diverse queries and users is required.

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APPENDICES

Appendix I: Introductory Letter to Professional Librarians and Graduate

Students

Inuwa Bukar,
Kenyatta University,
Department of Library and Information Sciences,
P. O. Box 43844-00100,
Nairobi, Kenya.

Dear Sir/Madam,

RE: REQUEST FOR INFORMATION

I am Bukar Inuwa. A PhD student in the Department of Library and Information Sciences at Kenyatta University. As a requirement for completing this degree program, I am conducting research on the Adherence to Reference Service Standards for Service Delivery in Selected Federal University Libraries in North-eastern Nigeria. Professional librarians and postgraduate students from chosen federal institutions in Northeast Nigeria will be the participants in this study. I am hereby kindly requesting you to be therefore a participant in this study.

This letter is intended to get your consent to participate in the study and to seek the data necessary to conduct the study. I intend to use surveys and interviews to collect data. The questionnaires will be sent through chief librarians' offices to professional librarians and post-graduate students, an online link will also be provided to access the questionnaire online for those that would prefer online access. Surveys may be returned to the researcher through the same offices. The researcher intends to interview university librarians at the institutions selected. After the research is finished, the findings and recommendations will be shared with the participating universities. The Kenyatta University Library will retain access to the same results. Additionally, I would want to reassure you that any information you provide will be treated with the utmost confidentiality and will be used only to accomplish the study's goals. If you have any questions or issues, please contact me.

Yours truly,

Bukar, Inuwa
Reg. No. E83F/37864/2017
Cell Phone: +2348033200600
Email: bukarinuwa@students.ku.ac.ke

Appendix II: Questionnaire for Graduate Students

Instruction:

In part A, please fill in the relevant description that best describes your profile, and in section B, please select one option that best expresses your position on each of the claims in accordance with reference service standards in your library. Please keep in mind that repeated replies per statement will be ruled incorrect, and the data generated by this survey will be used for research reasons only, not academic placement. As a result, confidentiality will be strictly adhered to.

Sections A: Demographic Information

Please Indicate Your Institution: -----

Please Indicate Your Department: -----

Please Indicate Your Program:

1. PGD ()
2. Masters ()
3. Ph.D ()

Section B: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in Line with IFLA digital reference service standard practice.

Please mark in the table below whether you agree or disagree with the following assertions about the level of compliance to IFLA digital reference service standard practice (tick as appropriate).

1. General Guidelines

s/n	Items	Responses		
		Agree	Undecided	Disagree
1	Reference librarians are dedicated to providing patrons with the most effective help possible.			
2	When addressing inquiries from patrons, reference librarians exercise professional politeness and respect.			
3	Reference librarians acknowledge receipt of patron queries and respond as soon as possible.			
4	Reference librarians establish and adhere to a specified response time policy.			
5	Reference librarians use effective search techniques.			

2. Content Guidelines

s/n	Items	Responses		
		Agree	Undecided	Disagree
1	By advising customers on how to locate the answers to their queries, reference librarians promote information literacy.			
2	Reference librarians maintain impartiality and refrain from making value judgements about the topic matter.			
3	To identify "the actual inquiry" and give correct responses, reference librarians utilize a neutral questioning interview approach.			
4	Jargon, acronyms, and Internet abbreviations are not used by reference librarians (such as: BTW, IMHO).			
5	All answers are written clearly by reference librarians and are related to the level of the query (as much as possible).			

3. Chat Guidelines

S/N	Items	Responses		
		Agree	Undecided	Disagree
1	Reference librarians quickly identify themselves when initiating a discussion.			
2	Reference librarians reply to chat requests in order of receipt.			
3	While searching for patrons' inquiries, reference librarians frequently reassure patrons that they have not been disconnected.			
4	Reference librarians create bookmarks for commonly visited websites.			
5	Reference librarians use proper spelling, grammar, and capitalization.			

4. Guidelines for Chat Sessions

s/n	Items	Responses		
		Agree	Undecided	Disagree
1	Before replying, reference librarians allow the patron to thoroughly describe his or her information requirement.			
2	Open-ended inquiry methods are used by reference librarians to urge patrons to elaborate on their request.			
3	When feasible, reference librarians will explain the search procedure to the patron and summarize the results.			
4	In the event of a recommendation, reference librarians provide the patron with comprehensive information on who to ask, how to reach them, and what to ask for.			
5	When a patron's behaviour is improper (as judged by institutional standards), reference librarians will either deliver a prepared warning message or disconnect the connection.			

Section C: Perception of Postgraduate Students on Reference Librarians' Behavioral Performance in Line with RUSA guidelines.

Kindly mark in the table below whether you AGREE or DISAGREE with the following assertions about the degree of compliance to IFLA's standard practice for digital reference services (tick as appropriate).

1. Visibility/Approachability

S/N	Items	Responses		
		Agree	Undecided	Disagree
1	Reference librarians' welcome patrons with a warm greeting to start a discussion.			
2	At times, reference librarians rove around the reference or public areas, assisting customers.			
3	Reference librarians assist patrons with the beginning stages of their search and then move on to assist other patrons. Offers further help if necessary.			
4	Whether the reference desk has been left unattended, reference librarians will regularly check to see if there are any customers waiting for help. When demand is high, seeks assistance from other staff members.			
5	Remote inquiries are promptly addressed by reference librarians.			

2. Interest

S/N	Items	Responses		
		Agree	Undecided	Disagree
1	Reference librarians provide their undivided attention to the patron and his or her information requirements.			
2	Throughout the transaction, reference librarians keep eye contact with the patron.			
3	Reference librarians affirm their comprehension of the patron's requirements by nodding their heads, giving short explanations, or asking further questions to better comprehend the patron's inquiry.			
4	Reference librarians respond promptly to user inquiries.			
5	Reference librarians keep frequent online or voice contact with patrons to express interest and reassure them that their inquiry is still valid and that a response is on the way.			

3. Listening/Inquiring.

S/N	Items	Responses		
		Agree	Undecided	Disagree
1	To the patrons, reference librarians are attentive, courteous, and helpful.			
2	When necessary, reference librarians define the aims or objectives of the patron's research.			
3	Clarifying questions are used by reference librarians to refine a search query.			
4	Reference librarians maintain impartiality throughout the transaction and make no value judgements regarding the topic matter or nature of the inquiry.			
5	Reference librarians are sensitive to the privacy of patrons and preserve confidentially after the transaction.			

4. Searching

S/N	Items	Responses		
		Agree	Undecided	Disagree
1	The reference librarian ascertains what the patron has previously attempted and encourages the patron to add suggestions.			
2	The search method is explained to the patron by reference librarians.			
3	When there is little or excessive information, reference librarians work with the patron to narrow or widen the topic.			
4	When applicable, reference librarians provide pointers, specific search pathways, and the names of resources utilized to get the answer, so that the client may learn to answer comparable queries on his or her own.			
5	When feasible, reference librarians employ suitable technology to assist patrons in navigating information resources.			

5. Follow-Up

S/N	Items	Responses		
		Agree	Undecided	Disagree
1	Reference librarians inquire whether the patron's inquiries have been fully addressed.			
2	Reference librarians urge patrons to return if they have more inquiries.			
3	When more topic expertise is required, reference librarians consult with other librarians or experts in the field.			
4	Reference librarians inform patrons about various accessible reference paths (e-mail, chat, etc.)			
5	If the patrons' question has not been satisfactorily addressed, reference librarians direct the patron to other sources or institutions.			

Section D: The Information Needs of Postgraduate Students

Kindly mark in the table below whether you AGREE or DISAGREE with the following assertions about meeting the information needs of postgraduate students by reference and information service. (Tick as appropriate).

S/N	Items	Responses	
		Agree	Disagree
1	Need for current awareness on academic development and scholarship		
2	Need for information on research activities		
3	Need for information to update professional knowledge		
4	The need for information on seminar and article writing		

Section E: User satisfaction with reference and information service.

Kindly mark in the table below whether you AGREE or DISAGREE with the following assertions about user satisfaction with reference and information service. (Tick as appropriate).

S/N	Items	Response	
		Satisfied	Dissatisfied
1	Reference librarians respond quickly to users query		
2	Response time		
3	Quality of information		
4	Competence in solving query		

Thank you for taking your time to fill this questionnaire!

APPENDIX III: Questionnaire for Professional Librarians

Instruction:

Please complete the relevant data in Section A that best defines your profile, and one choice in Section B that best expresses your position on each of the claims in accordance with your library's reference service standards. Please note that repeated replies to a single statement will be ruled incorrect, and that the data collected for this survey will not be utilized for academic placement reasons, but rather for research purposes only. As a result, strict secrecy will be respected.

Sections A: Demographic Information

Please indicate Your Institution -----

Please indicate Your Academic Qualification -----

Please indicate Your Years of Experience

- i. 1 – 5 ()
- ii. 6 – 10 ()
- iii. 11 – 15 ()
- iv. 16 – Above

**Section B: Status of reference service being offered in Federal University
Libraries in North-East Nigeria**

Please tick (√) the type(s) of reference services being offered in your institution from the list below.

- 1) Traditional Reference Services (Face to Face)
 - a. Information Services ()
 - b. Bibliographic Verification and Documentation ()
 - c. Inter-library Loan and Document Delivery Services ()
 - d. Current Awareness Services (CAS) ()

- e. User Education ()
- f. Selective Dissemination of Information Services (SDI)()
- g. Reprographic Services. ()

2) Reference Services Via Digital Means

- a. Email Reference Services ()
- b. Webform ()
- c. Ask A Librarian ()
- d. Chat (using instant messaging (IM) Social Media Applications)()
- e. Videoconferencing ()

3) Both Traditional and Digital Method of Reference Services Delivery()

Section C: Challenges experienced by librarians in the process of providing reference services and adhering to standards

Kindly indicate in the table below the extent to which you AGREE or DISAGREE with the following statements regarding the level of conformity to IFLA digital reference service standard practice (tick as appropriate).

S/N	Items	Responses	
		Agree	Disagree
1	Adequate librarians' reference skill and competence		
2	Adequate professional reference service training		
3	Adequate infrastructure		
4	Competent ICT skills		
5	Sufficient information sources and collections		
6	Adequate Modes of communication in providing reference services		

Section D:

Kindly indicate below any other challenges you encounter in the process of providing reference services and adhering to standards

.....
.....

Section E:

Kindly indicate below the best ways to deal with the identified challenges

.....
.....
.....

Thank you for taking your time to fill this questionnaire!

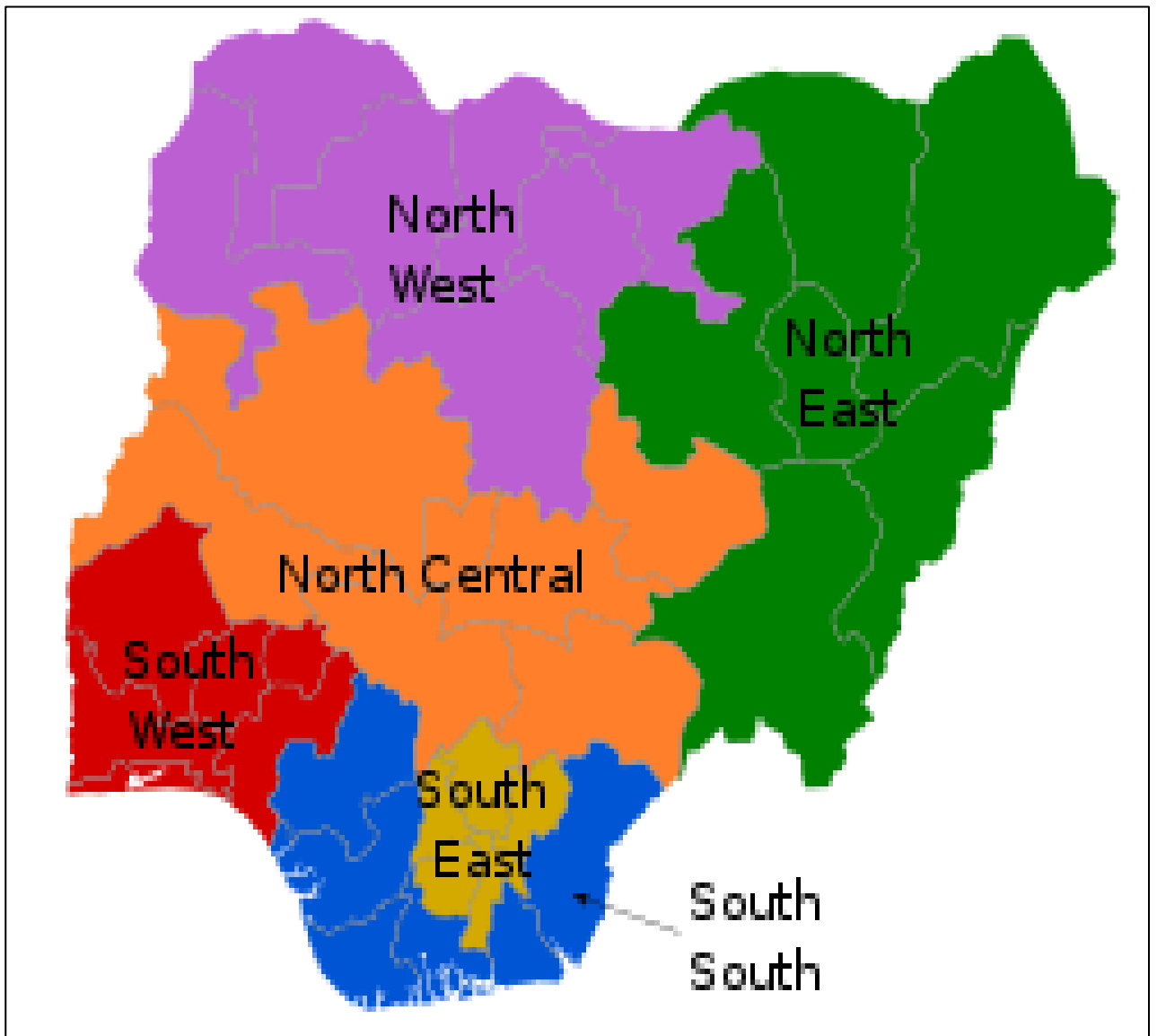
**Appendix IV: Interview Schedule for Head of Libraries on the Challenges of
Reference Services**

1.
 - a) With the current situation on ground in your library, how will you describe your reference librarian's skills and competence in terms of providing adequate reference services?
 - b) In modern times, reference services have shifted to digital, how capable are the staff compared to librarians across the world?
2.
 - a) How competent are your reference staff on ICT usage?
 - b) Is there training specifically for staff development on ICT application?
3.
 - a) Are there any professional reference service training for the staff?
 - b) If yes, how consistence is the training programs? If no, why don't they undergo professional reference training?
 - c) Will you rate the staff training over the years as effective and beneficial to the development of reference services in your library?
4.
 - a) How is the library funded?
 - b) Will you rate funding of the library over the years as sufficient?
 - c) What other sources of funding for reference service purposes do the library have?
5.
 - a) Can you freely comment on the adequacy of available infrastructure?
 - b) Does the available infrastructure effectively cater for both digital and traditional reference services?
 - c) How do you handle a limited infrastructure situation that does not support adequate reference services?

6. a) How sufficient are the information sources and collection in the library?
 - b) Are there challenges faced by reference librarians in carrying out their duties as regard to information sources and collection?
 - c) How do you address issues of inadequacy of information sources and collections?
7. a) Do you take out time to observe the modes of communication adopted by reference librarians in providing reference services?
 - b) Are the modes of communication in accordance to standard professional ethics?
 - c) In the case of variation from the standard ethical practice, how do you avert future occurrence?

Thank you so much for your time!

Appendix V: Map of Nigeria Showing the Six Geo-Political Zones.



Source: FGN, 2007

Appendix VI: Graduate School Research Authorization Letter



**KENYATTA UNIVERSITY
GRADUATE SCHOOL**

E-mail: kubps@yahoo.com
dcan-graduate@ku.ac.ke
Website: www.ku.ac.ke

**P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530**

Our Ref: E83F/37864/17

Date: 2nd November, 2021

The Director General,
National Commission for Science, Technology & Innovation,
P.O. Box 30623-00100,
NAIROBI

Dear Sir/Madam,


RE: RESEARCH AUTHORIZATION FOR MR. BUKAR INUWA-REG.NO. E83F/37864/17

I write to introduce Mr. Inuwa who is a Postgraduate Student of this University. He is registered for a Ph.D. degree programme in the Department of Library & Information Science in the School of Education.

Mr. Inuwa intends to conduct research for Ph.D. thesis entitled, “Adherence to Reference Service Standards for Services Delivery in Selected Federal University Libraries in North Eastern Nigeria”.

Any assistance given will be highly appreciated.

Yours faithfully,


**PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL**

EM/cao

Appendix VII: Approval for Research from Ibrahim Babangida Library



**IBRAHIM BABANGIDA LIBRARY
MODIBBO ADAMA UNIVERSITY, YOLA
OFFICE OF THE UNIVERSITY LIBRARIAN**

REF.: MAU/LIB/L.5

DATE: 16/03/2022


The Dean,
Graduate school
Kenyatta University
P.O. Box 43844, 00100
Nairobi, Kenya.

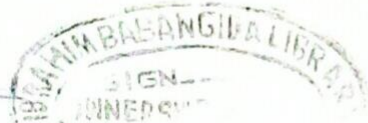
RE: APPROVAL FOR RESEARCH

This is to notify you that Mr. Inuwa Bukar with registration number E83F 37864 2017 has conducted data collection on his research thesis titled: **"Adherence to Reference Service Standards for Service Delivery in Selected Federal University Libraries in North-eastern Nigeria"**.

All necessary assistance was given to him during the data collection as requested.

Thank you.


Ijantiku, C. Moses
Head, Readers' Services Division
For: University Librarian



Appendix VIII: Research Approval from Federal University of Kashere

FEDERAL UNIVERSITY OF KASHERE

Vice-Chancellor
Professor Umaru A. Pate, FSFSP, MNIPR, AM (ORBITCOM/UNESCO)
(Kaigamma Adamawa)
 B.A (Hons), M.Phil (Ghana), PhD (Maid)

University Librarian
Prof. Jibril Attahiru Alhassan
 BLS (ABU), MSc (DELSU) PhD (UNN)



P.M.B 0182 Gombe, Gombe State
 Nigeria.

08056537849
 08061639356
 jalhassan@fukashere.edu.ng
 jalhassan26@gmail.com

Office of the University Librarian

January 31th 2022

The Dean,
 Graduate school
 Kenyatta University
 P.O. Box 43844, 00100
 Nairobi, Kenya.

RE: APPROVAL FOR RESEARCH

This is to notify you that Mr. Inuwa Bukar with registration number E83F/37864/2017 has conducted data collection on his research thesis titled: **“Adherence to Reference Service Standards for Service Delivery in Selected Federal University Libraries in North-eastern Nigeria”**.

All necessary assistance was given to him during the data collection as requested.

Thank you

Dr. Temboqe Andrew
 For: University Librarian

Appendix IX: Approval Letter from University of Maiduguri



UNIVERSITY OF MAIDUGURI
...Centre of Excellence

DR. YAHAYA ALIYU BLS, MLS, PhD, CLN
University Librarian, Ramat Library

OFFICE OF THE LIBRARIAN

February 24th 2022

The Dean,
Graduate School
Kenyatta University
P.O. Box 43844, 00100
Nairobi, Kenya.

RE: APPROVAL FOR RESEARCH

This is to notify you that Mr. Inuwa Bukar with registration number E83F/37864/2017 has conducted data collection on his research thesis titled: **“Adherence to Reference Service Standards for Service Delivery in Selected Federal University Libraries in North-eastern Nigeria”**.

All necessary assistance was given to him during the data collection as requested.

Thank you

Yours faithfully

Professor Yahaya Aliyu



P.M.B. 1069, Maiduguri, Nigeria | Tel: 08065917556, 08099277810 | E-mail: yayaaliyu@yahoo.com
All correspondence should be addressed to the University Librarian